NIAGARA 1966

PREPARED BY
REGIONAL DEVELOPMENT BRANCH
OFFICE OF THE CHIEF ECONOMIST
ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

NOVEMBER 1966

NIAGARA 1966

Prepared by the Regional Development Branch of
The Office of the Chief Economist
Department of Economics and Development

Presented to the "State of the Region" Meeting of the Niagara
Regional Development Council, November 8th, 1966

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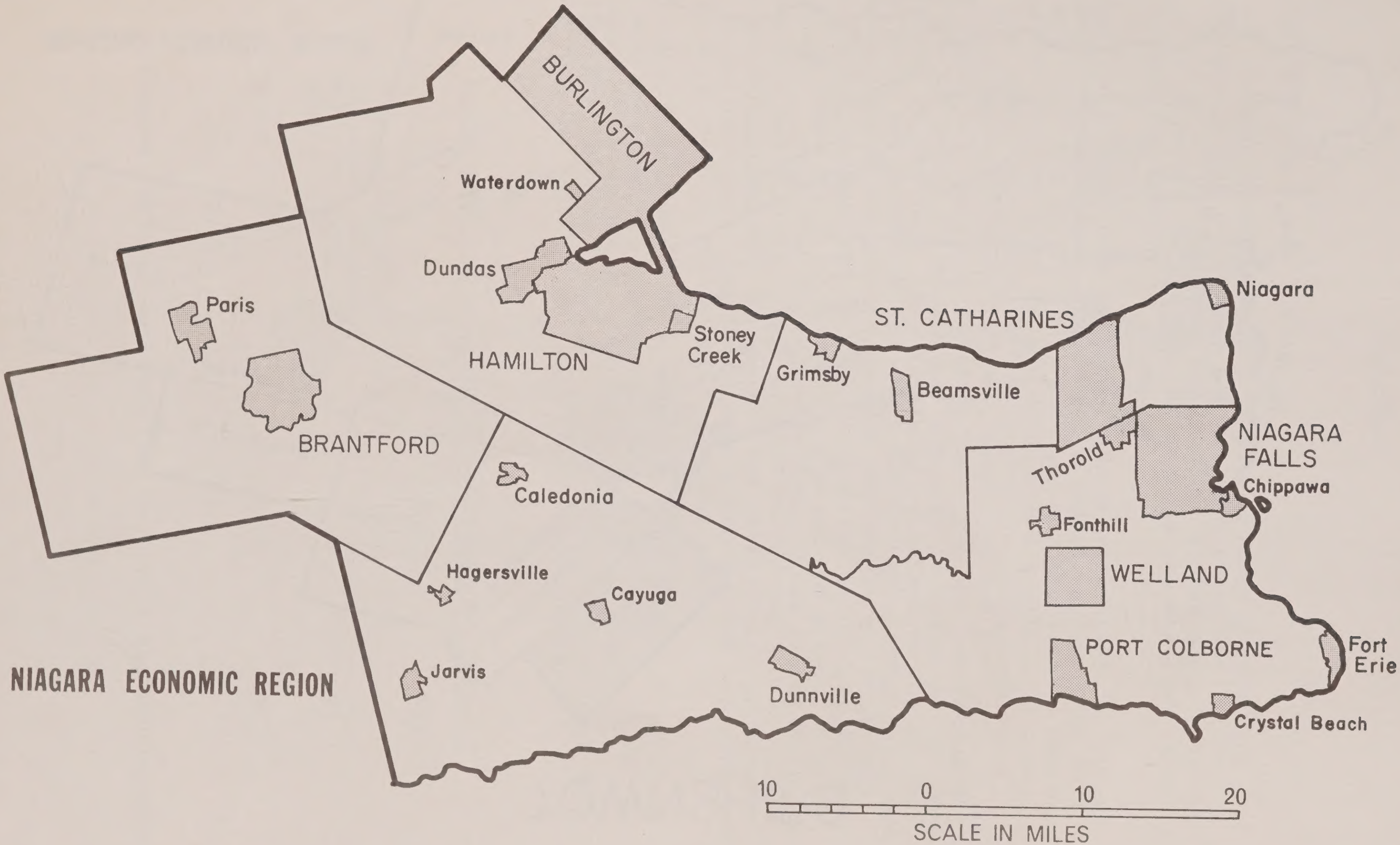
MUNICIPALITIES



TOWNSHIPS

NIAGARA ECONOMIC REGION

SECTION I

Introduction

The economy of any area may be viewed as an interaction between people and things and how they shape the forces of supply and demand. What the economic system does in effect is to organize the production of goods and services (supply) to meet the demands of society.

Section II will deal with the characteristics of the inhabitants of the Niagara Region while subsequent sections will deal with the supply side, that is, how the various sectors of the economy react to the demands and limitations placed upon them. One can view the economy as being made up of three basic sectors - primary, secondary and tertiary. Primary and secondary industry relate to the production of physical goods while tertiary industry is concerned with the supply of services. Primary industry refers to the production of raw materials and unprocessed goods; among these are agricultural and forest products and minerals. Secondary industry is involved with the processing of primary products; among these are T.V. dinners, newsprint and steel. Finally, tertiary industries provide services. These are of infinite variety and include, among others, recreation and entertainment facilities such as resorts and restaurants, personal and business services, hairdressers and doctors and government services such as police and this publication.

In 1961, the service sector was the most important of the three in terms of employment. Over half, (nearly 52 per cent) of the employed in Ontario were in this sector. Estimates suggest that by 1970 the service sector will account for about 57 per cent of total employment.

Percentage Distribution of Employment in Ontario

	1961	1970
Primary Industry	10.5	6.6
Secondary Industry	35.7	34.0
Tertiary Industry	51.6	57.2
Unspecified	2.2	2.2
* Total	100.0	100.0

* Estimates, Ontario Department of Economics and Development.

The other two sectors involved with the production of goods account for under half of total employment in the Province. As the above table indicates, the primary sector employed only 10.5 per cent of those employed and may account for as little as 6.6 per cent of employment in 1970 while the secondary sector is expected to remain virtually constant.

A similar picture emerges when considering the value of production. In 1963 the service sector accounted for 52.5 per cent of total production; in 1970 this could increase to 55 per cent. In the meantime, the value of production of primary and secondary goods should undergo moderate declines.

Percentage Distribution by Industry of Total Value of Production in Ontario

	1963	1970
Primary	6.8	5.1
Secondary	40.7	40.3
Tertiary	52.5	54.6
* Total	100.0	100.0

This is not to suggest that the sectors in each region should conform precisely to the proportions that exist in the Province. Nor is it to suggest that an area with a high proportion of services has a strong economy than one which does not. What is important to economic strength is how the sectors are related to each other. That is, the strength of a region's economy will vary directly with its ability to provide the goods and services necessary to its economic activities. For instance, a new plant in a community will provide new jobs. If the labour force in the community is available and is capable of filling these jobs, or if new workers come to live there then incomes in the community will increase. Similarly, an area which can provide the goods and services necessary to the new industry will earn more income than one which cannot. If the new industry creates demands on the service sector, (such as sewers) which the community's economy is unable to supply, then a new industry may actually cost the community money. It follows that in economic terms, the type of activity in which a region should indulge should be a type of activity for which its economic base can assemble the necessary inputs at minimum economic cost.

* Estimates, Ontario Department of Economics and Development.

Niagara 1966 is a sketch of the economy in the Niagara Region. If some parts of the economy have been favoured over others in the text, it is not because of any bias in their favour, but because information on them was more readily available.

The material for this report was prepared in the Regional Development Branch of the Department of Economics and Development under the supervision of Mr. C. P. Honey and Mrs. M. B. Levitt. Research and analysis were carried out by Mr. M. Martini. Miss G. A. Smith and Mr. I. Taylor prepared the sections on primary industry and recreation respectively. Miss A. K. Rich and Mr. C. W. Tappenden collected the statistics and the drafting was done by Mr. W. Cameron and Mr. J. Heginbottom. The cover design was by Mr. J. Heginbottom and the population distribution map from the Economic Atlas of Ontario was by courtesy of the editor, Dr. W. G. Dean.

A large number of departments and commissions assisted in the assembly of material for this publication. The typing was the responsibility of Mrs. N. Murphy and her staff.

SECTION II

Population: Niagara Economic Region

1. Numbers and Distribution

In 1961 the population of the Niagara Region was 762,288. Of the five counties Wentworth was the most populous with 358,837 people; and Haldimand was the least with 28,197. Wentworth County was also the most densely populated with 783 persons to the square mile, while Haldimand was again the least, with only 58.

Population By Counties in Niagara Region, 1961-1986

	1961	1986
Brant	83,839	101,000
Haldimand	28,197	35,800
Lincoln	126,674	258,000
Welland	164,761	294,900
Wentworth	358,837	644,800
Region	776,299	1,334,500

Despite the rural nature of much of the Region only 17.9 per cent of the population lived in rural areas and 5.8 per cent lived on farms. In fact, there was a higher percentage of people living in urban areas in the Region, (82.1 per cent) than in the Province as a whole, (77.4 per cent). Nearly 80 per cent of the population lived in the urban areas of St. Catharines, Hamilton, Niagara Falls and Brantford. Preliminary figures give Metropolitan Hamilton nearly 450,000 people, St. Catharines over 95,000, Brantford 59,000 and Niagara Falls approximately 56,000.

Population projections suggest that the Region will continue to have approximately 12 per cent of the Province's population through 1986. By that time, the provincial population should exceed 11 million and that of the Region should be in the neighbourhood of 1.3 million. Most people will live in or around cities. More than 82 per cent, (1,088,700) of the Region's inhabitants will live in the five largest urban areas. By 1986 the Hamilton Metropolitan Area may have a population as large as 700,000 while St. Catharines may reach 154,000, Brantford 101,000, Niagara Falls 90,000 and Welland 60,600. Hamilton's growth alone could account for over half the Region's total population increase.

Wentworth will continue to have the largest county population, adding nearly 300,000 people while Haldimand, adding only 7,500, will probably remain much the smallest.

2. Origins

In 1961 nearly 35 per cent of the Region's population was born outside the Province. A quarter of these were born elsewhere in Canada, slightly less than the 30 per cent for the Province as a whole. The largest immigrant group was from the United Kingdom, 29 per cent of the immigrant population; Italy was second, accounting for 10 per cent. The County of Wentworth has attracted the largest number of out-of-province migrants, 132,195 or over half the regional total. Welland County attracted the next largest group, 55,953 while Haldimand County attracted the lowest number, just under 5,000. Apparently people from outside the Province prefer to live in the more urbanized areas.

3. Age Groups

In 1961 the age composition of the Region was almost identical with that of the Province - for example, nearly 45 per cent of the population was under 25 years of age while approximately 8 per cent was 65 years of age or more. In 1986 there will probably be a slightly higher percentage of people under 25 in the Province than in the Region. On the other hand, it is likely that there will be a higher proportion of people 65 and over in the Region than in the Province. In both areas, however, the number of people under 25 and over 65 will increase considerably. In Niagara, people under 25 will make up nearly 50 per cent of the population, while those 65 and over will comprise more than 9 per cent. These figures are up from 45 per cent and 7 per cent, respectively.

During the period 1961-1986 there will probably be a decline of 6 per cent in the number of people between the ages of 25 and 55. These people will probably make up 33 per cent as opposed to 39 per cent of the population. Wentworth County has the smallest percentage of people under 25 and has the largest percentage of people between 25 and 44. Haldimand County has the highest percentage of people under 25 and the smallest of those between 25 and 44. The County also has the highest percentage of people over 65. It seems that people in their productive years prefer a more urban environment.

Percentage Age Composition

	1961	1986
0 - 14	31.9	33.9
15 - 24	12.9	15.3
25 - 44	27.9	25.4
45 - 64	18.8	16.1
65 +	8.5	9.3

4. The Labour Force

The labour force includes all people 15 years of age and over who are either at work or seeking work. It excludes, for instance, housewives, retired folk and all others whose income does not derive from employment.

The Region, (including the Town of Burlington), has a total labour force of well over 300,000, 80 per cent of which is to be found in the urban areas of Hamilton, St. Catharines, Brantford, Niagara Falls and Welland. Hamilton alone has over half the total labour force. By counties, Wentworth has the largest share of the work force, followed by Welland, Lincoln, Brant and Haldimand.

The percentage of people 15 and over who actually are in the labour force is known. The Region's participation rate is slightly lower than that for the Province, 55.3 per cent as against 56.9 per cent. The City of Hamilton has the highest participation rate in the Region, 57 per cent, and in general rates are highest in the cities. On a county basis, Wentworth has the highest rate while Welland has the lowest.

Projections call for the Region's labour force to grow to 425,000 by 1981. The increase, during the period 1961-1981, will be slightly lower than that for the Province, 49.3 per cent compared with 51.3 per cent. A large part will result from an overall rise in the participation rate. Male participation rates, however, will decline as will those in the 15 to 24 and the over 65 years age groups. Rates will probably increase for other groups.

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5. Education

On the whole educational achievement in the Region is below that of the Province. In the province of those persons five years of age and over and no longer in school, 33.2 per cent have attended three or more years of high school. The corresponding figure for the Region is 30.6 per cent. There are, to be sure, intercounty variations; for example, the percentage for Welland is 30.3 while that for Haldimand is 23.1.

The Provincial percentage for those receiving university degrees is also higher, 3.3 as opposed to 2.5 for the region. Again, there are variations; Lincoln has a percentage of 2.8 while Haldimand has a percentage of 1.5.

Population
Census Metropolitan Areas And Other Major Urban Areas
With Component Parts, 1961 Census #
Niagara Region

	1951	1956	1961	1966 (Preliminary)
Census Metropolitan Areas -				
Hamilton -	280,293	338,294	395,189	447,197
Hamilton (City)	224,951	250,914	273,991	297,167
Ancaster (Twp.)	4,586	9,157	13,338	14,934
Beverly (Twp.)	4,138	4,559	5,023	5,519
Binbrook (Twp.)	1,384	1,865	2,557	3,120
Burlington (Town)	18,913	30,524	47,008	65,507*
Dundas (Town)	7,941	10,886	12,912	15,374
Flamborough, E. (Twp.)	2,342	3,427	4,334	5,058
Flamborough, W. (Twp.)	3,925	5,294	7,001	7,903
Glanford (Twp.)	1,871	3,025	4,714	5,717
Saltfleet (Twp.)	6,973	12,383	16,424	17,872
Stoney Creek (Town)	1,922	4,506	6,043	7,100
Waterdown (Vge.)	1,347	1,754	1,844	1,926
Other Major Urban Areas				
Brantford	47,064	52,351	56,741	
Brantford (City)	46,633	51,869	55,201	59,305*
Brantford (Twp.) - Part	431	482	1,540	
Niagara Falls	40,899	48,906	54,649	
Niagara Falls (City)	22,874	23,563	22,351	56,370*
Chippawa (Vge.)	1,762	2,039	3,256	3,830
Stamford (Twp.) - Part	16,263	23,304	29,042	
St. Catharines	67,303	85,025	95,577	
St. Catharines (City)	59,302	75,117	84,472	95,617
Thorold (Town)	6,397	8,053	8,633	8,796
Thorold (Twp.) - Part	1,604	1,855	2,472	

* Change in Area since June 1, 1961.

Source: Census of Canada, 1951, 1956, 1961 and 1966.

5. Education

On the whole, educational achievement in the Region is below that of the Province. In the Province, of those persons 5 years of age and over and no longer in school, 24.2 per cent have completed 3 or more years of high school. The corresponding figure for the Region is 22.2 per cent. There are, to be sure, inter-county variations, for example, the percentage for Welland is 23.6, while that for Haldimand is 16.7.

The provincial percentage for those receiving university degrees is also higher, 2.4 as opposed to 1.8 for the Region. Again, there are variations; Lincoln has a percentage of 2.0 while Haldimand has a percentage of 1.1.

6. Incomes

Income from wages and salaries usually accounts for 2/3 of total personal income, and in 1963 the Region accounted for 13.3 per cent of provincial wages and salaries. This percentage was down from the 1957 figure of just over 14.

Nevertheless, total average personal incomes, including stock dividends and payments from the government, were higher than the provincial average.

Estimated Personal Per Capita Income, Niagara Region

Brant	$ 3,793
Haldimand	3,241
Lincoln	4,172
Welland	3,902
Wentworth	4,332
Niagara	4,131
Province	4,052

Only the Central Ontario Region of the ten economic regions had a higher per capita total annual income than Niagara; $4,352 as opposed to $4,131.

There were proportionally fewer people in the lower income brackets and more in the upper income ranges than there were for the Province as a whole. In 1963, 58 per cent of the people receiving income in the Province earned less than $4,000. The corresponding regional figure was 54 per cent. At the same time 27.2 per cent in the Region earned between $5,000 and $10,000 while for the Province this figure was only 23.2. These high average earnings notwithstanding, nearly one quarter of the income recipients in the Niagara Region earned less than $2,000 a year and in Haldimand County more than a third earned less than this amount. More will be said about incomes in later sections.

Section III

Primary Industry

In 1961 primary industry in Ontario had the smallest per cent of employment and value of production of the three sectors. Moreover in all four categories of the primary industry sector, both employment and potential production will probably either virtually stagnate or decline. But employment will decline proportionally more than production indicating a considerable rationalization and productivity increase in the sector as a whole.

Percentage Distribution of Employment and Potential Production in Primary Industry in Ontario 1961-70

	Employment		Potential Production	
	1961	1970	1961	1970
Agriculture (labour force)	7.7	4.7	3.5	2.6
Fishing & Trapping	0.1	0.1		
Forestry	0.8	0.5	0.4	0.2
Mining	1.9	1.4	2.9	2.3
Total (primary sector)	10.5	6.6	6.8	5.1

In the following paragraphs the major characteristics and intra regional variations in the primary industry sector will be discussed.

1. Agriculture

Farm characteristics such as size, capital investment, type of operation and expenditure are indicators of agricultural productivity.

i. Farm Size

Throughout the Region the number of farms and the acreage of farmland decreased over the decade 1951-1961. The 16 per cent decline in the number of farms in the Region was only slightly less than the 19 per cent Provincial decline. While the Provincial decline was partly offset by a 9.9 per cent increase in average farm acreage, the Region experienced only a 7.6 per cent increase, suggesting farm consolidation was less pronounced in the Niagara Region than in Ontario as a whole. In Brant and Haldimand Counties the greater decrease in number of farms than in farmland is indicative of farm consolidation. For instance the average farm in Brant grew from 99.9 acres in 1951 to 115.4 acres in 1961. On the other hand in Lincoln and Wentworth Counties, both the number and total area of farms decreased proportionally, suggesting some encroachment upon agricultural land.

The average farm in the Region in 1961, was 88 acres, or 57 per cent of the equivalent Provincial farm. Farm sizes in the Region varied with the type of agricultural activity. In Lincoln County, fruit and vegetable farms, which accounted for 64 per cent of total commercial farms, averaged 37 acres; dairy and livestock farms comprised 75 per cent of the farms in Haldimand and averaged 158 acres. Overall average commercial farm size in Lincoln County was 63 acres; in Haldimand it was 152 acres.

Of the 963,387 acres in farm land in the Niagara Region in 1961, 82 per cent was classified as improved farmland, a decrease of 10 per cent from 1951; 570,000 acres were under crops while another 148,000 acres had been cultivated and seeded to pasture for grazing purposes.

In 1961, commercial farms comprised 68 per cent of the Region's 10,940 farms. Dairy farms were the most numerous, accounting for 29 per cent of all commercial operations; fruit and vegetable farms represented 27 per cent and livestock farms, 21 per cent. Considerable variation was evident in the distribution of commercial farms within the Region. Dairying was the leading commercial activity in all counties, except Lincoln. The second most frequent type of commercial farming activity differed from county to county; in Brant, it was field crops; in Wentworth and Haldimand, livestock; and in Welland, fruit and vegetables. Seventy-one per cent of the part-time farms and 75 per cent of the residential farms in Niagara were located near the urban areas of Lincoln, Welland and Wentworth counties.

Number, Area and Average Size of Farms, 1951 and 1961

		Number of Farms	Area of Farms (acres)	Average Area Per Farm (acres)	Area of Farm as % of Total Land Area
Brant	1951	2,236	223,402	99.9	82.9
	1961	1,771	204,451	115.4	75.9
	*	79	92		
Haldimand	1951	2,370	278,378	117.5	89.1
	1961	2,070	269,237	130.1	86.2
	*	87	97		
Lincoln	1951	3,503	178,614	51.0	84.1
	1961	3,238	165,853	51.2	78.1
	*	92	93		
Welland	1951	2,035	155,444	76.4	62.8
	1961	1,494	125,707	84.1	50.8
	*	73	81		
Wentworth	1951	2,895	232,659	80.4	79.4
	1961	2,367	198,139	83.7	67.6
	*	82	85		
TOTAL, Niagara	1951	13,039	1,068,497	81.9	80.0
	1961	10,940	963,387	88.1	72.2
	*	84	90		
TOTAL, ONTARIO	1951	149,920	20,880,054	139.3	9
	1961	121,333	18,578,507	153.1	8
	*	81	89		

* Change Index Value, 1961 (1951 = 100)

Expenditure figures which include taxes, rent, hired agricultural labour and feed and seed costs exhibit wide intra-regional differences. The figures for Brant and Lincoln far exceed both the regional average expenditure of $30.62 per acre and the provincial average of $15.44 per acre. In these two Counties the labour-intensive crops - tobacco, fruit and vegetables - greatly influence the figures. It has been estimated that approximately 47 per cent of the total expenditure for fruit production is devoted to labour. In Haldimand where livestock is the most important agricultural commodity, less labour is required per farm and, therefore, represents a smaller proportion of total expenditures. Taxes are a more significant factor in Brant, Lincoln and Welland.

Gross Revenue and Expenditures
Per Acre, 1951 and 1961

	Expenditures	Gross Revenue	
	1961	1961	Change Index Value, 1951 = 100
	$	$	
Brant	40.28	107.13	227
Haldimand	14.44	38.34	128
Lincoln	45.42	110.79	133
Welland	25.08	54.67	170
Wentworth	33.77	77.23	160
Niagara Region	30.62	75.54	166
Ontario	15.44	41.00	146

Gross revenue per acre also displayed wide variation. Brant experienced the greatest increase in gross revenue over the period 1951-1961. In absolute terms, Haldimand had the lowest gross revenue per acre figure, $38.34, while Lincoln had the highest, $110.79. Despite this high figure, Lincoln's rate of increase was less than that for the Region and the Province,

thereby suggesting that fruit and vegetables did not experience as great a relative increase in gross value between 1951 and 1961 as did, for example, field crops in Brant County.

ii. Farm Capital

Farm Capital investment is divided into three categories; livestock and poultry, land and buildings and machinery.

The structure of farm capital investment in the Niagara Region is similar to that in the Province. The average regional capital value of $401.00 per acre, however, not only exceeds the Provincial investment of $201.00, but is increasing at a greater rate than the Provincial value. The percentage of total capital value per acre in livestock and poultry, however, has decreased since 1951, particularly in the counties of Brant and Wentworth where the index of change was lower than that for the Province in the same period. Between 1951 and 1961 the value of land and buildings more than doubled in all counties except Lincoln.

Increased farm mechanization and scarcity of farm labour have accompanied the trend to larger farms. A measure of this mechanization is the number of tractors in use. In 1961, 86 per cent of the Region's farms had one or more tractors with the leading counties being Haldimand and Brant. When the number of tractors is compared with the average farm size a pattern emerges. In Lincoln County, with an average farm size of 51 acres, over 76 per cent of the farms had only one tractor. In the counties of Brant and Haldimand where the average farm size was at least double that of Lincoln, 49 per cent and 41 per cent respectively of the farms had two or more tractors.

iii. Agricultural Employment

Regional agricultural employment in 1961 was 9 per cent lower than it had been in 1951. In terms of the agricultural component of the total labour force, the Niagara Region ranked fourth with 5.2 per cent of its total labour force in agriculture. Only 12 out of 53 counties and districts had a greater percentage of their total work force in agriculture than Haldimand. Welland and Wentworth have the smallest percentages of their labour

force in agriculture, 2.8 per cent and 2.4 per cent, respectively. Lincoln, owing to a specialization in fruit production, has 30 per cent of the agricultural employment of the Niagara Region.

iv. Livestock

During the decade 1955-1965 the value of livestock on farms has increased from $26 million to $35 million; however, over the same period the number of livestock almost doubled to 3.8 million. Lower average prices for livestock in 1965 than 1955 account for the different rates of growth between number and value of livestock. For the Region as a whole the value and number of livestock increased 31 per cent and 84 per cent, respectively.

In 1965, total livestock was valued at $34.4 million. Cattle accounted for $27 million or 78 per cent of the total value, while swine, hens and chickens, turkeys and sheep made up the remaining 22 per cent.

Value of Livestock on Farms
1965

Cattle	$26,835,000
Swine	3,669,900
Hens & Chickens	2,558,300
Turkeys	1,046,597*
Sheep	309,600
Total	$34,419,397

* 1961 figures

Dairy cattle, valued at $17 million were nearly twice as important as beef cattle. In all five counties dairy cattle outstripped beef cattle in both number and value. About 32 per cent of the value of cattle in the Region came from Haldimand, 23 per cent from Brant and 20 per cent from Wentworth. In 1965, farmers in the Region sold over 312 million pounds of fluid milk valued at $15.2 million to commercial dairies. Large quantities of skim milk, chocolate milk, buttermilk and fluid cream were also marketed annually.

Over the period 1955-1965, the Niagara Region increased its share of swine production from 4.7 per cent to 6.1 per cent of the Provincial total. Numerically, Wentworth is the leading swine producer; in terms of value, however, the leading county is Haldimand. In four of the five counties both the number and value of sheep has dropped considerably. In Brant, for example, the number and value both decreased about 40 per cent. Although Haldimand experienced an increase, it amounted to only 2.1 per cent. Despite decreases in the number and value of sheep, the Niagara Region's share of the Provincial totals has increased. There were increases in the number and value of hens and chickens, and of turkeys between 1955 and 1965. Thirty-five per cent of the hens and chickens were reared in Lincoln and 40 per cent of the turkeys in Haldimand.

v. Field Crops

In 1965 the Niagara Region produced $29 million worth of field crops. Three counties, Brant, Haldimand and Wentworth, each produced approximately 25 per cent of the total value. That year, 480,710 acres were devoted to field crops, a decrease of 47,482 acres since 1951.

Hay was the most important field crop, accounting for 35 per cent of the total value of all field crops. Production in the Region expanded from $6.8 million in 1961 to $10.1 million in 1965. Haldimand, with over $3 million worth of hay grown in 1965, was the leading hay-producing county, stemming from Haldimand's importance as a cattle producer.

Although oats have increased in value since 1955, the 1965 figure is less than that for 1961. Since 1951 the corn-for-husking acreage has at least tripled in all five counties, in large part at the expense of oats. This pattern will probably continue as oats-rust spreads and competition from oat producers in Western Canada increases. Also, corn has a higher feed value per acre than any other crop, consequently in the near future corn may replace oats as the principal component of livestock feed.

Winter wheat acreage has dropped considerably, from 90,361 acres in 1951 to 37,200 acres in 1965. Numerous other field crops such as mixed grains, rye, buckwheat and spring wheat have also suffered reductions in acreage.

Farm Value of Major Field Crops

1955 and 1965

Crop	1955 Value of Crops ($000's)	1955 Per Cent of Total Crops	1965 Value of Crops ($000's)	1965 Per Cent of Total Crops	Region as a Percentage of Ontario 1955	Region as a Percentage of Ontario 1965
Hay	5,565	33.3	10,126	35.0	6.2	7.5
Oats	3,614	21.6	5,125	17.6	7.2	6.9
Winter Wheat	2,960	17.7	2,049	7.1	11.0	9.3
Corn for Husking	1,339	8.0	4,991	17.3	4.0	6.5
Potatoes	1,030	6.2	3,289	11.4	7.9	10.9
Corn for Fodder	874	5.2	1,691	5.9	7.3	6.7
Mixed Grains	707	4.2	581	2.0	1.8	1.5
Other (1)	607	3.6	1,053	3.6	2.1	2.3
All Field Crops *	16,697	100.0	28,905	100.0	5.7	6.4

(1) Includes Rye, Barley, Field Crops, Soya Beans, Buckwheat, Spring Wheat, Flax, Dry Beans and Dry Peas.

* Does not include Sugar Beets, Seeded Pasture and Tobacco.

Note: Due to rounding figures may not add to 100.

The importance of potatoes has increased in the Niagara Region and in 1965 comprised 11 per cent of the Provincial total in value as opposed to 8 per cent in 1955. In the 4-year period 1961-1965, the value of potatoes increased from $1,440,880 to more than $3.2 million. Wentworth, the largest producer, grew 62 per cent of the Niagara Region's potatoes by value in 1965.

Tobacco is only of importance in Brant County where 8,162 acres were planted in 1965. The total production of 14 million pounds brought $9 million, 9 per cent of the Provincial total.

vi. Vegetables

Three million dollars worth of vegetables or 13 per cent of the Provincial total was produced in the Niagara Region in 1965. Although the acreage devoted to vegetable cultivation fluctuates from year to year, since 1951 the general trend, with the exception of mushrooms, has been downward.

In 1959 Niagara's quarter of a million dollar mushroom crop represented 9 per cent of Ontario's total, in 1965 however, the Region grew mushrooms valued at $1.6 million or half the Provincial total. The introduction of air conditioning in dark houses, making it possible to grow two or three crops a year, where previously only one had been feasible. The result has been an increase in value and production taken place at a faster pace than acreage.

About a quarter of Ontario's crop of tomatoes for the fresh market is grown in the Niagara Region. Value, acreage and production for tomatoes for processing appear to be on a downward trend. Although the area occupied by asparagus has increased slightly since 1951, production has fallen off by 50 per cent and value by 25 per cent.

vii. Fruit

The Niagara Fruit Belt is of particular importance for the production of peaches and sweet cherries since it is the only area in Ontario where "tender fruit soil" coincides with "tender fruit climate".

The $16.9 million received by Niagara growers in 1965 represents 59 per cent of total Ontario fruit production and 26 per cent of Canadian production. In 1965, Niagara

Estimated Value of Marketed Production of Commercial Fruits

Niagara Region (1) 1959 and 1965.

Fruits	1959 Value $	1959 % of Ontario	1965 Value $	1965 % of Ontario
Peaches	3,186,520	71.5	4,635,500	83.8
Grapes	3,352,500	98.7	5,386,068	99.5
Cherries, Sour	530,140	65.1	1,230,507	75.9
Cherries, Sweet	894,000	91.0	1,418,100	90.8
Pears, Bartlett	371,028	66.8	928,405	79.8
Pears, other	631,958	89.3	784,016	88.5
Strawberries	374,990	26.6	856,575	38.0
Apples	339,690	6.9	826,705	9.9
Plums	354,640	88.0	563,500	93.5
Prunes	131,604	67.8	145,000	74.1
Raspberries	190,920	21.6	79,838	9.3
Cantaloupe	14,850	5.4	11,868	4.0
TOTAL, NIAGARA REGION	10,372,840	53.5	16,866,082	58.7
TOTAL, CANADA (2)	43,520,000		64,500,000(3)	
NIAGARA REGION AS % OF CANADA	23.8		26.1	

(1) Comprises fruit and vegetable districts covering Counties of Haldimand (Eastern Part), Halton, Lincoln, Welland and Wentworth, as outlined by Ontario Department of Agriculture.

(2) Includes apricots and 'other small fruit'.

(3) Preliminary Figure.

Source: Ontario Department of Agriculture.

produced 99.5 per cent of the Province's grapes, 94 per cent of its plums, 84 per cent of its peaches, 81 per cent of sweet cherries, 80 per cent of Bartlett pears and 76 per cent of sour cherries.

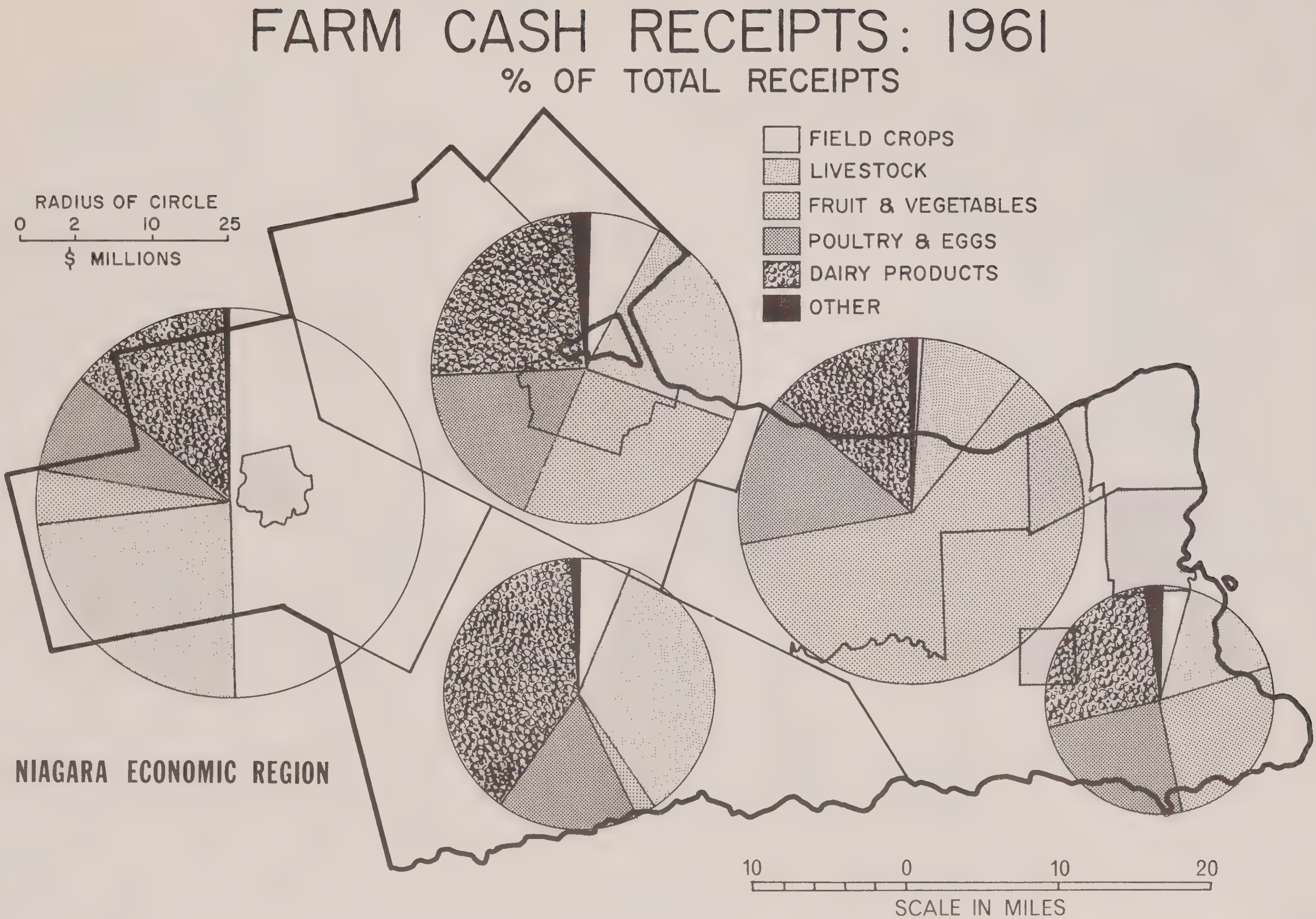
Grapes, valued at $5.4 million were the largest revenue crop in 1965 and formed the basis of Ontario's wine industry, which in 1962 produced factory shipments valued at $10.5 million. Although Niagara peach production has increased its share of Provincial total from 72 per cent in 1959 to 84 per cent in 1965, the 1965 production is only 22 per cent higher than that of 1957. Despite fluctuations, the proportion of value, acreage and production, for sweet and sour cherries has increased and in 1965 represented 16 per cent of the value of Niagara fruit.

Except for Bartlett pears, grapes and sweet cherries, all types of fruit have experienced acreage decline between 1951 and 1965. A total of 11,495 acres have been converted from fruit cultivation to other uses. Peaches suffered the greatest loss - 4,850 acres followed by plums and prunes.

Net Changes in Fruit Acreages
Niagara Fruit Belt, 1951 to 1965

	Change 1951-61 Acres	Change 1961-65 Acres	Total Net Change in Acres 1951-1965
Tender Fruit			
Peaches	-2120	-2730	-4850
Cherries, Sweet	- 60	935	875
Other Fruits			
Grapes	30	- 17	13
Plums and Prunes	-2425	-1055	-3480
Pears, Bartlett	- 105	389	284
Pears, Other	- 365	-1742	-2107
Cherries, Sour	- 160	- 641	- 801
Apples	-2350	921	-1429

Lincoln had 61 per cent of the total fruit and vegetables receipts in the Niagara Region. In Haldimand County livestock and dairy products made up 74 per cent of the county's $10 million worth of farm cash


FARM CASH RECEIPTS: 1961
% OF TOTAL RECEIPTS
FIELD CROPS
LIVESTOCK
FRUIT & VEGETABLES
POULTRY & EGGS
DAIRY PRODUCTS
OTHER
RADIUS OF CIRCLE
0 2 10 25
$ MILLIONS
NIAGARA ECONOMIC REGION
10 0 10 20
SCALE IN MILES

receipts. Three categories - fruit and vegetables, poultry and eggs, and dairy products - accounted for $5.3 million or 78 per cent of Welland's total farm receipts. In Wentworth County, livestock, fruit and vegetables, poultry and eggs, and dairy products together provided the bulk of the total receipts of $15 million.

In recent years acreage declines have been reversed in apples, sweet cherries and "other" pears.

Numerous and formidable are the problems faced by the Niagara fruit grower. Uncertain markets, fluctuating prices, and urbanization have combined to produce one central problem: low income from fruit production.

Summary

Farm cash receipts may be used as a convenient summary of the various components of agricultural production in the Region. There is more to the Niagara Region than the commonly-held view of fruit and vegetable domination would suggest. In 1961 farm cash receipts were divided into five relatively equal parts. Fruit and vegetables accounted for about a quarter; livestock and dairy products a fifth each.

Total farm cash receipts amounted to $72.8 million in 1961. Thirty per cent came from Brant, while Lincoln, Wentworth, Haldimand and Welland accounted for 25 per cent, 21 per cent, 14 per cent and 9 per cent respectively.

Considerable variation exists in the structure of farm receipts in each county. Brant's $11 million receipts from field crops represented 50 per cent of that county's total farm receipts and 83 per cent of the Region's total field crop value. Fruit and vegetables furnished 62 per cent of Lincoln's farm receipts.

2. Forest Products

Although forest-based industries in the Niagara Region had a total output of over $75,000,000 and employed over 3,500 people in 1960, little of the wood used was locally produced. Most of the Region's demand is for softwood but over 60 per cent of the Region's productive forests yield only hardwood. The result is that forest products have only minor significance in the economy of the Niagara Region.

3. Fishing

Fishing is no longer of great importance to the economy of the Niagara Region. In 1965 the total catch from the waters of Lake Ontario and Lake Erie was about 1.2 million pounds and worth just over $600,000. Nearly all of this catch was taken in Lake Erie.

Fisheries - 1965

	lbs.	$	lbs. per cent of Region	$ per cent of Region
Lake Erie				
Haldimand	11,341,688	377,695	89.6	62.8
Welland	1,244,728	215,169	9.9	35.8
Total Lake Erie	12,586,416	592,864	99.5	98.6
Lake Ontario				
Lincoln	40,826	5,296	0.3	0.9
Wentworth	37,271	2,959	0.2	0.5
Total Lake Ontario	78,097	8,255	0.5	1.4
Total	12,664,513	601,119	100.0	100.0

Neither lake offers the fisherman of the Region much in the way of quality or high-priced fish. In Lake Ontario the catch is mainly comprised of carp and smelts. In Lake Erie white fish are caught but perch and smelts predominate. The once popular blue pickerel is almost non-existent.

Employment is low. Probably not more than half a dozen men fish in Lake Ontario from ports in the Region on a commercial basis. Fishing techniques apparently have improved for fewer men are required to catch fish than were needed ten or more years ago. The problem of the fishing industry is essentially that the types of fish available are not the types that the market demands.

4. Mining

In 1964 Niagara had a mineral output valued at $25,297,000 - 2.8 per cent of Ontario's total. Of the $25.3 million, structural materials accounted for 89 per cent, non-metallic minerals 8 per cent and fuels 3 per cent. No metallic minerals were mined in the Niagara Region.

The Census of 1961 listed 474 people as "miners, quarrymen and related workers", that is, 0.2 per cent of the labour force of the Niagara Region.

Welland was the leading mining county, having 43 per cent of the total value of Regional output. Wentworth mined 18 per cent of the total, Haldimand and Brant 15 per cent each and Lincoln 9 per cent.

Structural materials production of $22.7 in 1964 accounted for 89 per cent of the Niagara Region's mineral output and 13 per cent of the structural materials produced in Ontario. These materials are largely consumed within the Region. Limestone representing 46 per cent was the most important item, followed by sand and gravel 24 per cent, lime 11 per cent, clay products 10 per cent and cement 9 per cent. In recent years all the materials, except clay products, have been increasing in value and production.

The Niagara Region in 1964 produced 9.1 per cent of Ontario's non-metallic minerals and is Ontario's only producer of gypsum. Since 1953, gypsum has been the Region's leading revenue producing mineral. But gypsum production has fluctuated considerably; however, the overall pattern exhibits an upward trend. In 1964 517,000 tons of gypsum worth $1,377,000 were produced, that is, volume increased 55 per cent and value 53 per cent over 1953.

While the increase in gypsum production was spectacular, that of peat was more so. In the 14-year period, 1953 to 1964, peat production grew from 1,319 tons to 26,000, a rise in value from $52,535 to $566,000. The Niagara

Region in 1964 accounted for 96 per cent of total Provincial production.

Quartz experienced a sizeable drop in value and production. The 1964 production amounting to 2,000 tons worth $3,000 were only 8 per cent and 17 per cent, respectively of their 1961 equivalents.

The natural gas found in Welland and Haldimand counties is the only fuel produced in the Region. The value of production in 1964 was $683,000 up from 1960 but still a 12 per cent decrease from 1953 values.

SECTION IV

Secondary Industry

In the introduction, secondary industry was shown to represent a declining proportion of the employment and value of production of the economy of the Province. Nevertheless, absolute increases are expected in employment between now and 1970 in all four categories of secondary industry.

Potential Employment in Secondary Industry, Ontario, 1970

	Employment 1961	Employment 1970	Per Cent Change 1961 - 1970
Manufacturing	627,100	764,000	+15.2
Construction	123,800	175,000	+ 5.7
Electric Power and Gas Utilities	26,500	32,000	+ 0.6
Water and other Utilities	2,500	4,000	+ 0.2
Total	779,900	975,000	+17.3

Similarly considerable increases may be expected in the potential value of production.

Potential Value of Production of Secondary Goods, Ontario 1970 in millions of current value dollars (1963)

	1963	1970
Manufacturing	5,070	8,250
Construction	739	1,515
Public Utilities	560	940
Total	7,420	12,065

Unfortunately, no comparable figures are available for the economic regions. Nevertheless we do know that secondary industry is of considerable importance to the Niagara Region.

1. Manufacturing

The value of shipments of manufacturers in the Niagara Region in 1962 was over 2.3 billion dollars, or about 18 per cent of the provincial total. The Niagara Region was second only to the neighbouring Central Ontario Economic Region in manufacturing output. Primary metals accounted for nearly a third of manufacturing activity. Nevertheless the Region has a broad industrial base with seven other manufacturing industry groups each accounting for five per cent or more of the Region's manufacturing production. Eight major industry groupings (out of a possible 22) account for over 85 per cent of the Region's output.

Selling Value of Shipments of Goods of Own Manufacture
Niagara Region 1962
($000's)

Industry	Value of Shipments	Per Cent
Primary Metals	$ 774,656	33.1
Metal Fabricating	223,396	9.6
Food & Beverage	214,173	9.2
Transportation Equipment	201,138	8.6
Chemicals and Chemical Products	178,544	7.7
Paper and Allied Industries	138,981	6.0
Machinery	136,075	5.8
Electrical Products	129,610	5.6
All Others	336,743	14.4
Region	2,333,316	100.0

What is important, of course, is how productive in terms of strengthening the Region's economy these industries are. There are a number of ways of looking at this.

Value added shows the amount of "work" that was done jointly by capital and labour on the goods that were produced in a particular stage of processing. Changes in value added result from increases or decreases in the productivity of labour or capital. Changes in capital productivity relate to the amount of capital invested as well as the degree of technological change. Labour productivity is a function of labour skills and the degree to which labour is able to combine with capital in the productive process. Growth in value added in the Region lagged behind the provincial average between 1957 and 1962, 10.2 per cent vs. 12.0 per cent. Only five industrial groups exceeded the provincial average for growth in their own industrial grouping, - furniture, transportation equipment, machinery, paper and wood products.

Value Added in Manufacturing, 1957 and 1962
($000)

	1957	1962	Per Cent Change 1957-62	Prov. Change 1957-62
Primary Metals	n.a.	329,411	n.a.	n.a.
Metal Fabricating	87,331	97,117	11.2	13.3
Transportation Equipment	77,788	95,987	23.4	15.0
Chemical Products	58,817	84,047	42.9	81.6
Electrical Products	101,400	78,398	-22.7	-3.5
Machinery	61,220	75,887	24.0	17.1
All Others (including primary metal in 1957)	585,241	310,295	n.a.	n.a.
Total Manufacturing	971,797	1,071,142	10.22	12.0

n.a. - not available

Another important indicator is employment. The Region's share of provincial manufacturing employment declined from 18.2 per cent in 1957 to 16.9 per cent in 1962, and employment within the Region in manufacturing fell nearly 7 per cent. The largest declines were registered in the knitting textile, electrical and wood products industries. All of these had declines of 20 per cent or more.

Percentage Employment Declines, 1957-1962

	Region	Province
Knitting	31.3	5.7
Textiles	25.9	14.0
Electrical Products	22.2	4.0
Wood Products	19.5	7.3
All Industries Decline	6.8	+0.4

Value added per wage earner may be used as an indicator of productivity. The Regional average value added per employee of $9,920 in 1962 was 12.6 per cent higher than the provincial average of $8,522. The Region improved its position relative to the Province between 1957 and 1962. In 1957 average value added per employee was only 9.9 per cent above the provincial equivalent. High values added per employee may well be related to the capital-intensive nature of some industries where capital can be substituted for labour in the productive process. It could also be related to the economies of sale made possible by the larger productive units found in these industries. Generally speaking, moderately high figures for value added per employee are found in industries where economies of large scale production also necessitate large numbers of employees per establishment.

The most capital intensive processes were in the chemical industry where value added per employee was $17,240. Other capital intensive industries included, primary metals, transportation equipment, paper and allied products and electrical products. Among the industries with low values added per employee were leather, clothing, knitting mills, wood and textiles.

Changes in value added per wage earner may also be used as an indicator of how an industry reacts to fluctuations in the economy. Declines in some manufacturing industries between 1957 and 1962 were a result of a high sensitivity to downturns in the economy. The electrical products industry in the Niagara Region, for instance, underwent severe stress which resulted in an overall decline in both employment and value added. Yet, the value added per wage earner actually rose by 15.7 per cent. The increase in value added per worker seems to indicate a rationalization of the electrical products industry.

Average earnings per wage earning is one of the most important indicators of an industry's contribution to an area largely because wages tend to be spent locally. Even if they are not spent on locally produced goods, or services, an income increase is generated. It follows that the higher the average wage the greater the impact on the Region's economy.

Average Earnings Per Wage Earner

Industry	Region		Province	
	1957	1962	1957	1962
Other (including primary metals)	4,836	5,681	3,848	5,260
Chemicals	4,499	5,620	4,163	5,138
Transportation Equipment	4,283	5,574	4,272	5,167
Machinery	4,135	5,287	3,974	4,890
Paper	4,113	5,160	4,168	4,934
Metal Fabricating	4,189	5,051	3,971	4,595
All Industries	4,128	4,950	3,789	4,478

An important and related indicator is total wages. In 1957 the Niagara Region accounted for 19.4 per cent of the total wages and salaries paid in the Province, but by 1962 this share had dropped slightly to 18.7 per cent. The five leading industries (primary metals, metal fabricating, transportation equipment, machinery and electrical products)

paid out about 67 per cent of the Regional manufacturing earnings in both 1962 and in 1957. The total wages paid out in each of the leather, textile, knitting mill, wood products and electrical products industries actually declined during this period.

In 1962 the overall average per worker earnings in the Region were $4,950, which was 10.5 per cent higher than the Province's average earnings of $4,478. This represents an improvement in the Region's comparative position over the period 1957-1962 since the average manufacturing earnings of $4,028 were only 6.3 per cent higher than the Provincial figure, $3,789 in 1957. Primary metal, chemicals, transportation equipment, machinery and paper, had the highest average earnings in the Region. All told, ten industries had higher average earnings in the Region than they did in the Province. In general, the larger employers with the highest value added per employee paid the highest wages. These were the same industries that paid high wages throughout the Province.

Although the manufacturing sector is a very important one in the Region, it would be a mistake to think that it is evenly distributed throughout the Region. Most of the manufacturing activity occurs in the five major centres of Hamilton, St. Catharines, Brantford, Niagara Falls and Welland. The City of Hamilton dominates all indicators, with approximately 50 per cent of the value of shipments, value added, employees and total salaries in the Region.

Per Cent of Manufacturing Activity of Selected Centres in the Niagara Region

Centre	Establishments	Value of Shipments	Value Added	Employees	Wages and Salaries
Brantford	11.4	6.6	6.6	9.3	7.9
Hamilton	36.9	50.3	55.2	49.6	51.7
St. Catharines	10.7	9.5	10.3	11.1	11.6
Niagara Falls	6.7	5.8	6.0	5.7	5.6
Welland	4.1	6.4	6.6	6.9	7.5
Total 5 Cities	69.8	78.6	84.7	82.6	84.3
Total, Region	100.0	100.0	100.0	100.0	100.0

Not only does most manufacturing activity take place in the cities but also there are indications that the most productive activity occurs there. In proportion to the number of establishments, the five centres have more than their share of shipments, value added and employees. A comparison of value added in the Region and in the urban areas shows that both Hamilton and Niagara Falls exceed the average regional value added per employee. In eleven of the fourteen groups for which data was available at the time of writing, at least one of the five urban centres had value added figures per employee which was higher than that for the Region. In the "all other groups" category which includes primary metals, Hamilton was much higher than the regional average.

A similar picture emerges from an inspection of wages and salaries per employee. In every group but one, every city had average wages higher than the regional average and for this group, non-metallic mineral products, information on two cities, Welland and St. Catharines, was unavailable.

It is likely that the last two paragraphs understate the case for the urban areas. In groups like primary metals where one city is known to have high wages and to dominate the Region's share of that industry, the average for the Region would be considerably raised. As a result, some of the centres might show up less well in regional comparisons even if they would not when compared with non-urban areas. The strength of the cities is further illustrated by a comparison of the number of people working in manufacturing in the cities and the number living in the cities and claiming to work in manufacturing. In the case of Hamilton, Brantford, Niagara Falls, Fort Erie and Dunnville, there were more people working in manufacturing in 1961 than there were living in these areas and claiming that they worked in manufacturing.

2. Construction

Construction is the second category of secondary industry, and can take at least four forms, residential, industrial, commercial and governmental and institutional. In 1965, the total value of building permits issued in the Niagara Region was in excess of $216 million. This represented an increase of 122.3 per cent over the 1961 figure. Just under one half of this construction was for residential purposes. Institutional and governmental construction accounted for 22.4 per cent and the remainder was for industrial and commercial purposes. The largest increase between 1961 and 1965 was in governmental and institutional construction.

Distribution of Value of Building Permits

	($1000)	Residential Per Cent	Industrial Per Cent	Commercial Per Cent	Gov't and Institutional Per Cent
1961	97,415	46.5	15.8	18.7	18.9
1962	109,876	46.4	8.9	17.6	27.1
1963	134,847	50.5	13.6	16.1	19.8
1964	172,596	54.3	12.3	18.6	14.8
1965	216,542	44.6	20.3	12.7	22.4
Percentage Increase 1961-65	122.3	113.2	184.9	51.7	162.6

Most of this residential construction takes place in the larger urban areas. The Hamilton Metropolitan Area accounted for 62.5 per cent of the dwelling unit started in 1965, in municipalities with populations of 5,000 and over in the Niagara Region. St. Catharines accounted for over 18 per cent. Thus, two urban areas with approximately 65 per cent of the population had over 80 per cent of the dwelling starts.

Number and Per Cent of Dwelling Units

Started in Centres of 5,000 and Over, 1965

	Number	Per Cent
Brantford Urban Area	613	8.5
Hamilton Metro Area	4,519	63.1
Paris	52	0.7
Grimsby	63	0.8
Niagara Falls Urban Area	292	4.0
Port Colborne	55	0.7
St. Catharines	1,308	18.2
Welland	292	4.0
Total	7,194	100.0

In terms of projects valued over $100,000, of the ten economic regions, the Niagara Region was second only to the neighbouring Central Ontario Region. Of the total value of projects so far started, over $100,000 in 1966, nearly 45 per cent are in Hamilton and another 18 per cent are in St. Catharines.

Projects Valued Over $100,000 in Niagara Region, January to August, 1966

Hamilton	14	Paris	1
St. Catharines	7	Thorold	1
Brantford	5	Welland	1
Thorold South	2	Clappison's Corners	1
		Brantford Township	1
		Grimsby	1

3. Public Utilities

In most areas of the Province, energy is considered a service, but Niagara has long been one of the Nation's leading energy producers. In 1965, the five main generating stations produced over 10.5 billion kilowatt hours of electricity. This amounted to approximately one quarter of the total production of electricity in the Province. Moreover, at least sixty per cent of this was exported from the Region. Of the power used within the Region, just under 70 per cent was for industrial purposes while 19 per cent was used residentially, and 11 per cent commercially.

For industries like Cyanimid of Canada, the availability of substantial amounts of cheap power has been tantamount to a raw material and a key factor in location in the Niagara Region.

Section V - Tertiary Industry

In the introduction, tertiary industry emerged as the most important of the three sectors in terms of employment and value of production. It was shown there that the dominance of the sector would not only continue through 1970, but would probably increase.

Percentage Distribution of Employment and Production in the Service Sector in Ontario *

	Employment		Potential Production	
	1961	1970	1963	1970
Transportation Storage and Communication	6.4	6.7	7.1	5.6
Trade (Wholesale and Retail)	14.0	15.3	13.0	12.6
Finance, Insurance, Real Estate and Services	22.2	26.9	25.1	29.2
Public Administration and Defense	9.0	8.3	7.3	7.2
Total Service Sector	51.6	57.2	52.5	54.6

Source: Ontario Department of Economics and Development, 1965

Actual employment increases are expected in all groups although the proportion of people employed in public administration will probably decline slightly. The actual value of production of any group is not expected to decline either. Nevertheless, changes in value of production and employment are not likely to be proportional within any groups. The share of employment in the transportation and the trade sectors will increase, but the share of production will not. Again, the share of production value of the public administration and defense group will decline by less than its share of employment, which will also increase.

It appears that production increases per worker, therefore, may take place only in the one group, and the increase here is insufficient to make up for a general decline in the productivity of tertiary industry.

1. Transportation

i. Water

Eight ports in the Niagara Region handled over 12,000 tons of cargo each in 1964. The largest by far was Hamilton where a total of nearly 10 million tons of cargo was loaded and unloaded. The second largest was Port Colborne which handled just over one third the amount handled at Hamilton. Thorold was third with just under one million tons.

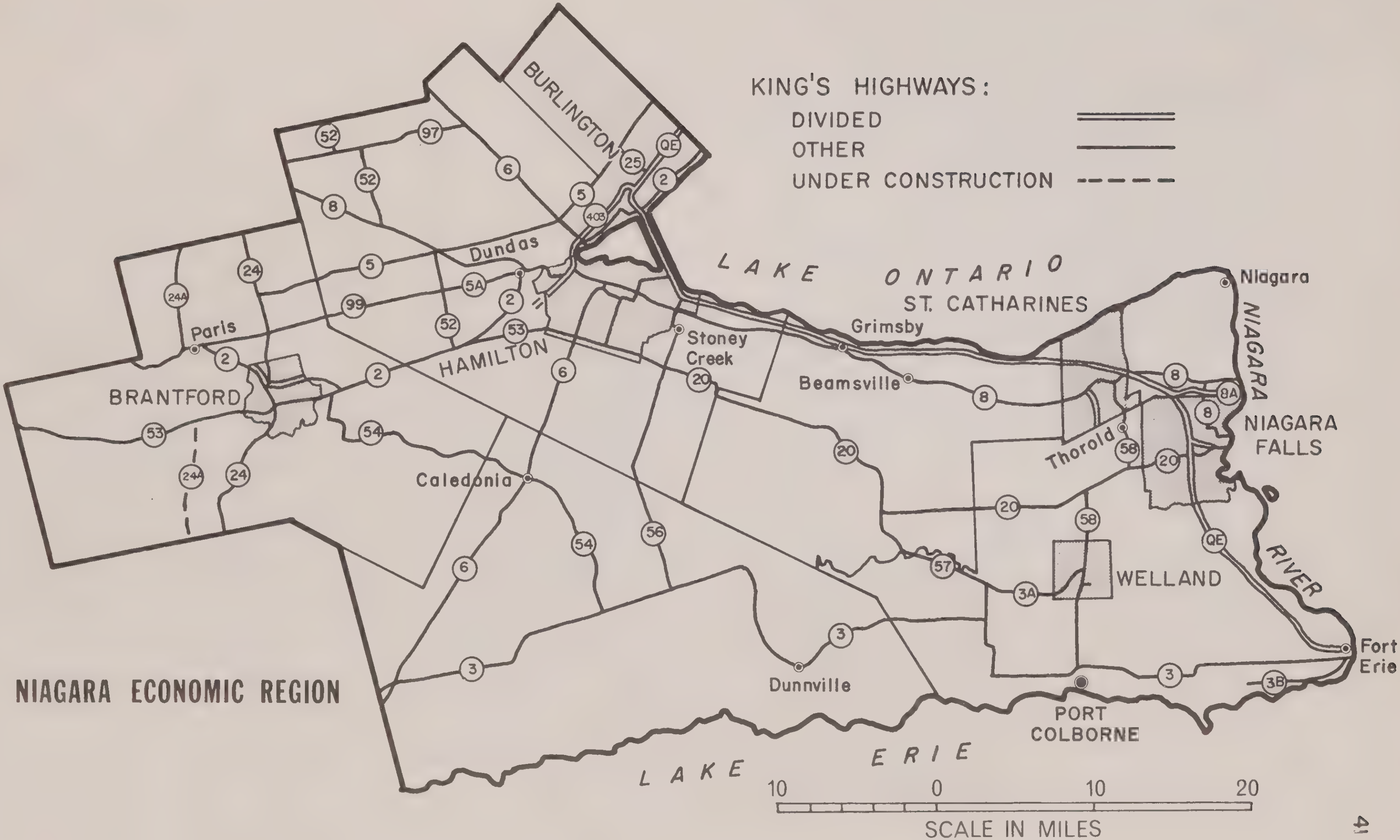
In both 1954 and 1964, the ports of Hamilton and Port Colborne together handled over 85 per cent of total cargo handled by eight major ports. Hamilton's share, however, grew from half the total to nearly 64 per cent. With the exception of St. Catharines and Niagara Bar, Hamilton was the only port to increase its share of the Region's cargo.

Percentage of Cargo Tons Handled at Selected Ports in the Niagara Region

	1954	1964
Hamilton	50.2	63.7
Port Colborne	35.5	24.2
Thorold	9.3	5.6
St. Catharines	1.9	2.6
Niagara Bar	0.0	2.8
Welland	2.3	0.8
Niagara Falls	0.0	0.2
Port Maitland	0.8	0.1
Total 8 Ports	100.0	100.0

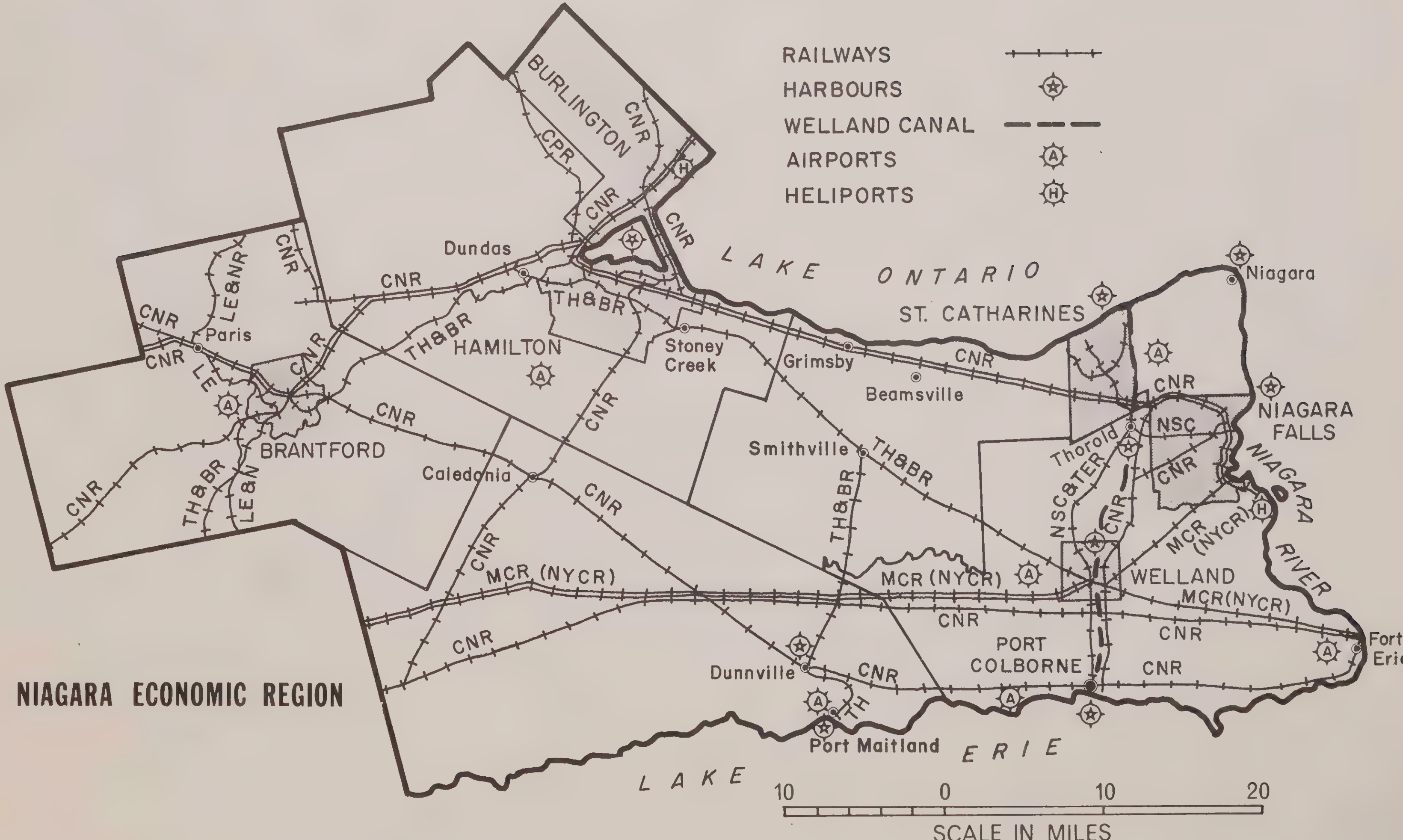
The ports of the Region are, with the exception of Port Colborne and Niagara Bar, receiving ports, that is more goods are unloaded than loaded. Only 22 per cent of the more than 14 million tons of cargo were loaded for shipment elsewhere.

TRANSPORTATION 'A'



NIAGARA ECONOMIC REGION

TRANSPORTATION 'B'



NIAGARA ECONOMIC REGION

The most important cargoes are related to the steel industry and include iron ore, coal and dolomite. The variety of goods is almost infinite and includes items from animal hair to molasses. Most of the goods, however, brought into the Region by ship are for further processing. The products of the Region's industries are shipped primarily by rail or road to their destinations in Ontario and other parts of Canada and the United States.

Since 1954, the number of vessels passing through the Welland Canal has barely changed, but the tonnage carried has increased nearly threefold - an indication of the increasing size of ships. As might be expected, the greatest increases in tonnage have occurred since 1959 when the St. Lawrence Seaway opened. In that year upbound Canal traffic doubled over the previous year, and since then has doubled again to over 18 million tons in 1964. Changes in downbound traffic (which was always much higher than upbound) has been equally striking. Comprising mainly of wheat, coal and iron ore, the latter two destined largely for points in the Niagara Region, downbound is about double that for upbound traffic.

ii. Road and Rail Transportation

The maps on the next two pages show the major highways and rail lines in the Niagara Region. The importance of transportation to urban areas is indicated by the heavy concentration of road and railways in these areas.

As will be shown in the section on recreation, well over half the trips made on the Niagara Region highways are for recreation, particularly on through roads. Plans for new highways have been made and are discussed in the Department of Highways' Niagara Peninsula Planning Study.

2. Trade and Finance

Retail trade is an indicator of the amount of commercial activity that occurs in a community. It indicates the role a community plays in its Region, and it may give an idea of the variety of services which exist. As might be expected, most retail sales are made in urban areas. In the Niagara Region almost 80 per cent of retail trade takes place in the five centres of Hamilton, Brantford, St. Catharines, Niagara Falls and Welland. Forty-three per cent of retail sales in the Region are made in the City of Hamilton alone. On the other hand, Haldimand, whose population is largely rural, has but three per cent of the total retail sales in the Region.

Retail Sales, Selected Centres, Counties, Niagara Region And Ontario, 1965

	Total Retail Sales ($000's)	% Of Region
A - Burlington		
Brant	86,412	9.7
Brantford	71,404	8.0
Wentworth	454,925	50.9
Hamilton	385,855	43.2
B - Niagara		
Haldimand	24,351	2.7
Lincoln	156,079	17.5
St. Catharines	130,118	14.6
Welland	171,096	19.2
Niagara Falls	73,948	8.3
Welland	49,328	5.5
Total, Niagara Region	892,863	100.0
Total, Ontario	8,068,323	

The financial transactions of an area are of considerable importance to the economy and are indicators of its activity. The number of cheques cleared is one type of transaction. In 1965, nearly $230 billion worth of cheques were cleared through the four clearing houses in the Niagara Region. This was an increase of 17 per cent over the previous year's figure or a little over two per cent more than the increase in the Province. Nevertheless the Region's total was only five per cent of the Provincial figure indicating that much of the Region's financial activity is carried on outside its boundaries.

There are many types of financial institutions. Among them are banks, trust, life insurance and finance companies, credit institutions, and savings and loan associations. Only banks and trust companies will be discussed here.

Banks take deposits of all sizes, and provide personal and other loans. Most municipalities are large enough to support a bank. Nevertheless banks tend to locate in centres of economic activity. Of the 214 bank branches in the Niagara Region, 72 are located in Hamilton, 25 in St. Catharines, 23 in Niagara Falls, 15 in Brantford, and 11 in Welland, that is, nearly 70 per cent of the banks are located in the five major urban centres.

Trust companies also accept deposits but do not make personal loans and are mainly concerned with investments related to estate management. They tend to locate in concentrations of financial activity. In the Niagara Region there are 12 trust companies. All are located in the six cities and half of them are in the City of Hamilton.

3. Public Administration and Defense

Although both production and employment in public administration and defense may decline proportionally to other groups, this sector will probably have increased absolutely by 1970. Unfortunately no figures on employment or production in this sector were available at time of writing for the Niagara Region. Nevertheless something can be said about educational and medical facilities which next to municipal government are the most important parts of this grouping.

i. Hospitals

In 1965 there were 25 hospitals in the Region having a

total of 5631 beds. The largest hospitals were located in Hamilton and over half the beds were in that City. Haldimand County had the fewest beds per 1,000 population, 4.8, and Brant County the most, 9.2. Only Welland and Haldimand were below one standard which calls for no less than 5.5 beds per 1,000.

Hospitals in Niagara Region in 1965

	No. of Hospitals	Rated Bed Capacity	Beds per 1,000
Brant	5	764	9.2
Haldimand	2	136	4.8
Lincoln	6	951	7.5
Welland	5	892	5.4
Wentworth	7	2,660	7.5
Total	25	5,403	7.1

ii. Education

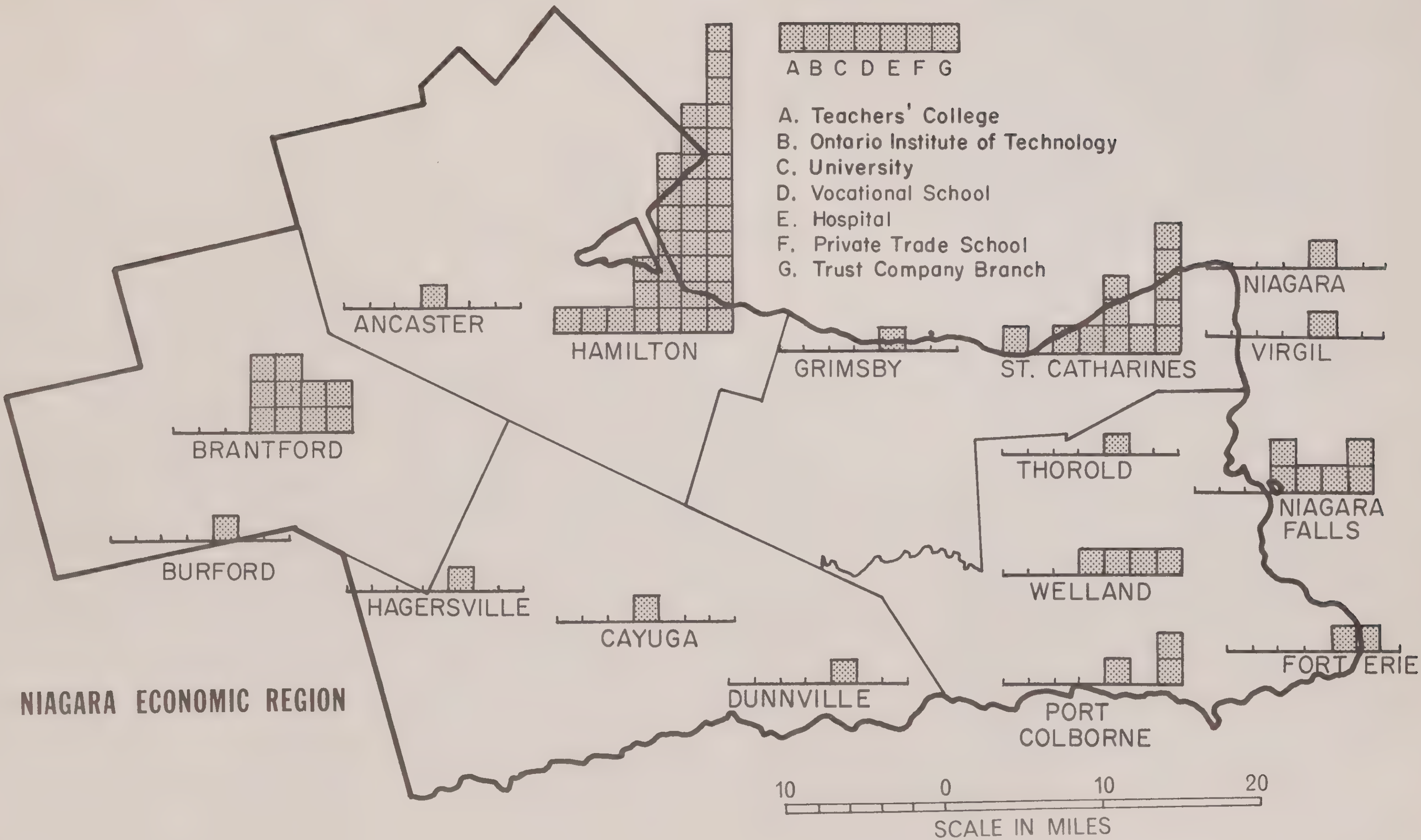
There are 37 secondary schools evenly distributed throughout the Region. The larger schools tend to be located in the urban areas.

Wentworth County has three vocational schools and one combined with a high school. All counties have at least one combined vocational and high school. Hamilton's Institute of Technology, with 583 students, is the only one in the Region. There are also 17 private trade schools (including two in the Town of Burlington). Nine of these are located in Hamilton.

To supply the elementary schools of the region there are two teachers' colleges with 845 students.

There are two universities, McMaster at Hamilton with 4,000 students and Brock at St. Catharines with 550, (1966-67). McMaster offers a full slate of courses with over two-thirds of its student body in Arts and Sciences. As yet Brock University offers courses only in Arts and Science. McMaster is much less a local university than

SELECTED SERVICE ACTIVITIES



NIAGARA ECONOMIC REGION

Brock. Over sixty per cent of Brock's students come from St. Catharines area while only 40 per cent of McMaster's come from Wentworth County.

4. Summary

The above paragraphs have shown that the majority of tertiary activity takes place in the urban areas. People either live in the city or they are willing to come to the city for its services, be they hospitals, schools or shops. In the following sections some further aspects of tertiary activity, recreation, water and municipal government will be considered.

SECTION VI

Water

The importance of water to the inhabitants of the Niagara Economic Region cannot be underestimated. Besides being a prerequisite to life itself, good water is an essential input to a host of industrial processes and virtually a necessity to any successful recreation area. Poor water conditions deteriorate the environment with smells and unsightliness and more important, offer a hazard to health, waste recreational resources and force municipalities into making heavy purification expenditures. In addition, uncontrolled water may mean floods, loss of good land, homes and even life. The following paragraphs will sketch briefly the sources and location of some of the water problems in the Niagara Region.

The Sources of Water Problems:

1. Pollution

Only a small part of the Region's water is unaffected by pollution. Lake Erie's pollution derives largely from American sources, but pollution in Lake Ontario and in the watercourses of the Niagara Peninsula are locally induced.

There are two types of pollutants: organic and inorganic. Organic pollutants include domestic waste and waste from industrial operations such as food processing. Many streams, (particularly fast-flowing ones) are capable of neutralizing substantial quantities of this type. Oxygen dissolved in the water stabilizes the organic compounds and renders them harmless. When excessive quantities of organic materials are dumped into the water, however, the supply of oxygen is depleted and bacteria forms, some of it disease producing. Algae, which is only a pollutant to the extent that it uses up the water's oxygen, is a result of organic pollution.

Inorganic pollutants include detergents and wastes from refineries and steel mills. They cannot be neutralized except by special treatment. Sometimes these pollutants are unobtrusive and harmless, as they are along some parts of Lake Erie; they can however, be obnoxious and dangerous as they are along the Welland River below the City of Welland.

2. Water Levels

Erosion and poor stream management mean the drying up of many watercourses during the summer and their flooding during spring. Although no flooding has occurred comparable to that which Hurricane Hazel brought to the Toronto area, such a possibility always remains. On the other side of the coin, dry stream beds or slow flowing waters frequently mean low water tables in surrounding areas, a loss of recreation potential and inability to handle discharges or waste material even in small quantities. These problems are dealt with further in the Niagara Peninsula Conservation report entitled "Water".*

The Location of Water Problems

1. Pollution

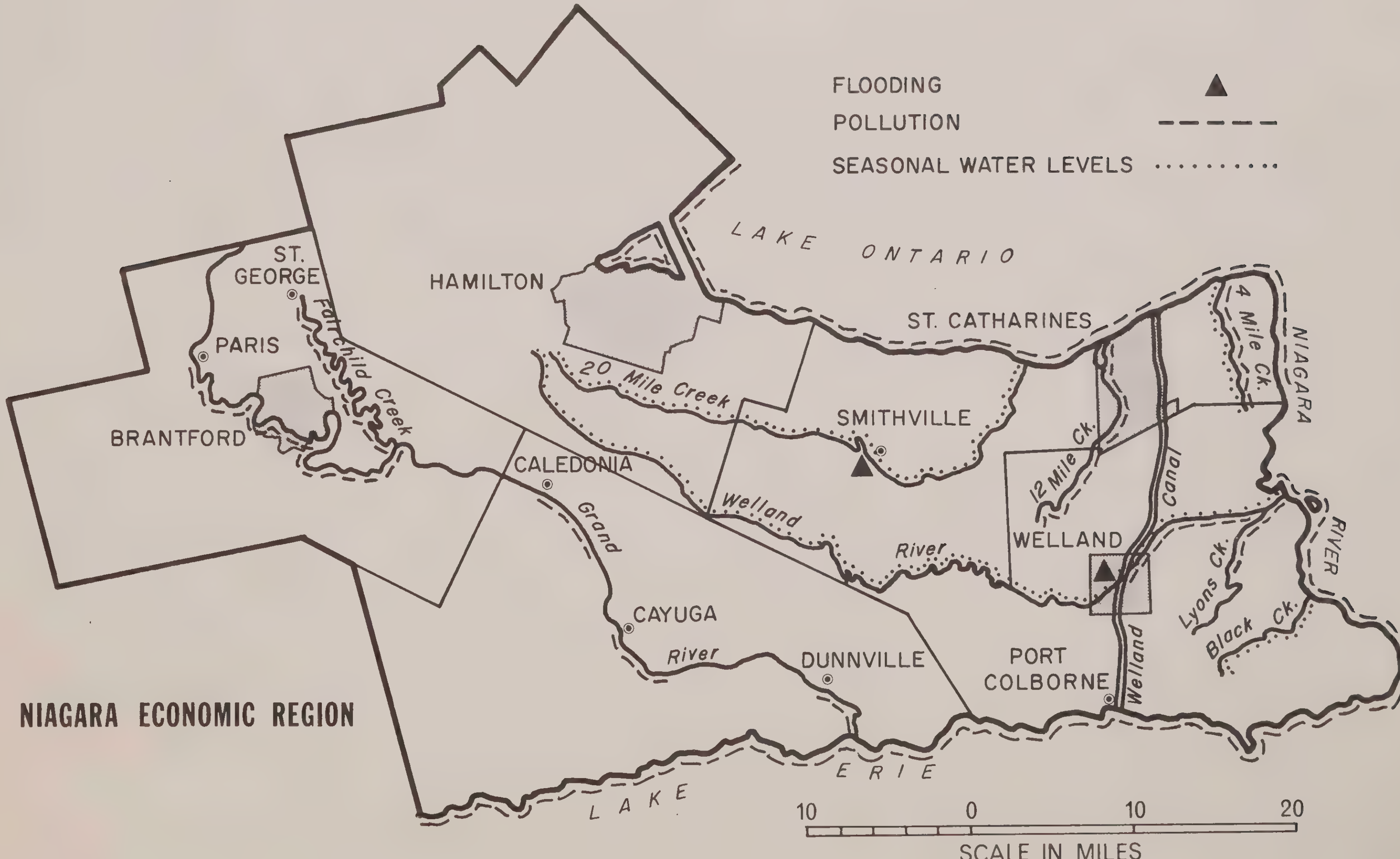
Depending on the direction of the winds both the Lake Ontario and Lake Erie shorelines are more or less polluted. Pollution in these lakes is both organic and inorganic. The exact extent and source of Great Lakes pollution will not be known until completion of studies by the Great Lakes Institute. Many of the Region's rivers and streams are also polluted. Perhaps the worst conditions are to be found in the Welland River below the City of Welland. There the river is virtually an open sewer where only worms and the coarsest of fish such as carp and bullheads can live. The degree of pollution increases further down the river immediately below the Cyanamid plant. Above the City of Welland and along the Welland tributaries the problem is much less severe. The waters of the Upper Welland are in fact, considered satisfactory by the Ontario Water Resources Commission. Lyons Creek is on the whole also satisfactory but on occasion gives high bacteria counts. The Niagara River is not as polluted as the Welland and is listed as satisfactory by the OWRC throughout most of its length, testimony to the ability of large fast waters to cleanse themselves.

The story is mixed for the other rivers in the Region. Twenty Mile Creek exhibits only sporadic pollution areas. Twelve Mile Creek running through St. Catharines is badly polluted. Four Mile Creek also fares badly as a result of ineffective septic tanks.

* See Section X Bibliography.

Municipality	Approximate % Area Sewered	Treatment Plant	Adequacy Of Facilities	Source Of Water Supply	(Quality) State Of Water Supply
Brant Co.					
Brantford (City)	80	Secondary	Adequate	Grand River	No problems
Brantford (Twp.)	none	none	problems	ground water	some problems
Burford	none	none	adequate	ground water	generally adequate
Dumfries S.	none	none	problems	ground water	generally adequate
Oakland	none	none	problems	ground water	generally adequate
Onondaga	none	none	adequate	ground water	some problems
Paris	15-25	secondary	adequate	ground water	hardness
Wentworth Co.					
Ancaster	none	none	adequate	wells	adequate
Beverly	none	none	adequate	private	adequate
Binbrook	none	none	adequate	private	adequate
Dundas	100	secondary	at capacity	City of Hamilton	adequate
Flamb. E.	none	none	adequate	private	adequate
Flamb. W.	none	none	adequate	private	adequate
Glanford	none	none	adequate	private	adequate
Hamilton	100	primary	inadequate	Lake Ontario	adequate
Saltfleet	none	none	adequate	private	adequate
Stoney Creek	100	secondary	inadequate	City of Hamilton	adequate
Waterdown	30	secondary	adequate	wells	high, iron
Haldimand Co.					
Caledonia	100	secondary	under study	wells	very hard, high iron
Canborough	none	none	adequate	private	adequate
Cayuga	none	none	under study	Grand River (complete treatment)	adequate
Cayuga N.	none	none	adequate	private and from Cayuga	adequate
Cayuga S.	none	none	adequate	private	adequate
Dunn	none	none	adequate	Lake Erie (partial treatment)	turbidity during spring periods
Dunnville	none	none	adequate	From Dunn Township (complete treatment)	no problems
Hagersville	almost complete	secondary	adequate	wells	very hard, taste & odour
Jarvis	100	secondary	adequate	Lake Erie (partial treatment)	no problems
Moulton	none	none	adequate	private	adequate
Oneida	"	"	"	"	"
Rainham	"	"	"	"	"
Seneca	"	"	"	"	"
Sherbrooke	"	"	"	"	"
Walpole	"	"	"	"	"
Lincoln Co.					
Beamsville	60	shares primary with Clinton	inadequate	Lake Ontario (complete treatment)	no problems
Caistor	none	none	adequate	no municipal water	
Clinton Twp.	none	none	needed at Vineland	Lake Ontario	Serves Vineland only. Adequate
Gainsborough	none	none	adequate	private	adequate
Grimsby	95	secondary	inadequate	Lake Ontario (complete treatment)	adequate
Grimsby N.	20	partial secondary	adequate	partial from Grimsby	adequate
Grimsby S.	Smithville only	primary	"	Smithville only (partial treatment)	adequate
Louth	none	none	"	part from St. Catharines	"
Niagara (Town)	33	primary	inadequate	Niagara River (partial treatment)	adequate
Niagara Twp.	Missisauga Beach only	primary	"	Wells, Springs and City Of Niagara Falls	no problems
St. Catharines	90	primary	inadequate	Welland Canal (complete treatment)	no problems
Welland Co.					
Bertie	none	none	adequate	Lake Erie - microstraining chlorination	Increase turbidity during spring period
Chippawa	100	secondary	loading study pending	City of Niagara Falls	no problems
Crowland	none	none	adequate	private	adequate
Crystal Beach	100	secondary	inadequate and under study	Lake Erie (partial treatment)	adequate
Fonthill	none	none	inadequate	two wells	adequate
Fort Erie	100	primary	adequate - primary no secondary	Niagara River (partial treatment)	unsatisfactory due to turbidity: study under way
Humberstone	none	none	study under way	private	adequate
Niagara Falls	100	primary	inadequate	Niagara River (complete treatment)	adequate
Pelham	none	none	adequate	private	adequate
Port Colborne	60	secondary	adequate but problems with septic tanks	Welland Canal (partial treatment)	adequate
Thorold (Town)	in built up areas only	shares primary in St. Catharines	adequate	Welland Canal (complete treatment)	adequate
Thorold (Twp.)	in built up areas only	shares primary plant with Thorold and St. Catharines	adequate	Welland Canal (partial treatment)	inadequate capacity causing turbidity problems
Wainfleet	Long Beach only	secondary	inadequate	private	adequate
Welland	100	primary plant under construction	inadequate	Welland Canal (complete treatment)	no problems
Willoughby	none	none	adequate	none	adequate

WATER PROBLEMS



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The situation along the Region's major river, the Grand, has been improving. Most of the pollution there is confined to the Paris-Brantford area. New sewage treatment facilities at these two municipalities, should eliminate much of the problem. Two of the Grand's tributaries, Whiteman and Fairchild Creeks exhibit sporadic pollution, but only Fairchild Creek is subject to serious pollution, a result of discharges from the Police Village of St. George. There is also some pollution around Cayuga, Caledonia and Dunnville.

2. Water Levels

The Niagara Peninsula Conservation Report found serious water level problems along four of the rivers in their study area. (This report excluded all of Brant and parts of Wentworth and Haldimand counties). Black Creek in Bertie and Humberstone Townships had very poor stream flow which seriously affected agriculture and wildlife. Four Mile Creek in Niagara Township had a similar problem of uneven stream flow. Its upper sections were quick but the lower reaches were sluggish. Twenty Mile Creek showed great disparities between spring and summer flows. So great, in fact, is the disparity that during the spring homes built on the floodplain are seriously threatened, particularly around Smithville. Finally, on two counts the Authority was concerned with the Welland River. First, they were worried lest the siphon under the Welland Canal might silt in and not be able to handle spring water volumes and second, they argued that the river should have an increased flow so that it would be able to handle a normal pollution load, particularly during the summer months.

Municipal Water Systems

Municipal water systems can be both the cause and the effect of the conditions outlined above. Pollution is usually the result of an ineffective sewage disposal system and an ineffective sewage system usually means that some sort of water supply treatment is necessary.

1. Water Supply

The sources of water supply in the Niagara Region are private and public wells, Lake Erie and Lake Ontario, the Grand River, the Niagara River and the Welland Canal. Groundwater supplies are the only ones in the Region that do not always require

purification. Such supplies, however are under constant threat from inadequate septic tank systems, and on occasion need treatment. Groundwater supplies in South Grimsby Township, for example, require purification. The other supply sources are all polluted to some degree and varying amounts of treatment are required. Happily, only a few areas are known to have problems with their water supplies and these are mostly seasonal and minor. Among the areas with water supply difficulties are the Townships of Brantford, Bertie, Thorold, and Onandaga and the Town of Fort Erie.

2. Waste Water Disposal

Only 25 of the Region's 59 municipalities have sewerage systems. Of these, only sixteen cover 50% or more of the municipality's area. Generally in rural areas sewers are not necessary; nevertheless at least four of the municipalities without sewers have serious waste disposal problems.

Of the 25 municipalities with sewers only the City of Welland had no treatment plant, although three shared others' facilities. Welland has a primary treatment plant under construction and scheduled for completion in 1967. Nine municipalities have only primary treatment facilities. Since primary treatment reduces organic pollutants by only 30%, the OWRC considers it inadequate and recommends secondary treatment. Two of the secondary plants, (at Stoney Creek and Crystal Beach) are operating above capacity and the one at Dundas has reached capacity. It is important to remember that secondary treatment is only 95% effective and does not remove all chemical pollution. At worst then, none of the 25 municipalities with sewer systems have adequate facilities, and at best only four do.

Section VII - Recreation

The enjoyment of leisure hours takes many different forms, the majority of which have some effect on land use or on the purchase of goods and services. Recreation falls into three types according to the form and duration of the activity.

Evening or weekend leisure hours are frequently spent close to home (attending a theatre, watching or participating in sport, or just strolling in the neighbourhood park), and as such may be termed 'urban'. Activities requiring a longer period of time (termed 'weekend activities') have a different form. The journey involved tends to be longer and consequently its impact on surrounding areas is greater. Typical activities of this type may include camping, cottaging, sailing, fishing, and skiing. The yearly vacation may consist of doing over a longer period of time 'weekend activities' or it may involve 'tourism', (i.e. the use of overnight accommodation and travel over greater distances).

Despite a certain degree of overlap in the use of facilities, these three recreational types should be distinguished in order to understand the particular form and character of recreational 'supply'.

With these distinctions in mind, the region can be examined in terms of its recreational demand (both endogenous and exogenous), and the facilities and provisions made for it.

Throughout Ontario and Canada, tourism and recreation have been among the fastest growing sectors of the economy. The Ontario Economic Council[1] has pointed out that they already account for ten per cent of the gross provincial product, and that in Canada its earnings are above the two billion dollar level.

In the Niagara Region the importance of tourism to the economy does not need to be stressed; the area is one of the greatest earners of tourist dollars in the province. Though direct figures are difficult to obtain, it would be reasonable to estimate that the percentage of total income attributable to tourism was at least twice to three times the Provincial average. What are the factors which have led to this situation?

(1) Ontario Economic Council <u>Ontario's Tourist Industry</u> Dec. 1965.

1. Landscape

The area is scenically attractive for a variety of reasons and has within it features ranging from the spectacular and unique to the interesting and pleasant. Of primary importance are the two lakes and the Niagara River with its world-famous falls. There is too, the escarpment with its views, wooded aspect, and cataracts, the fruitlands and the closely settled agricultural land. Of much lesser importance, at present, but with tremendous future prospects is the Grand River Valley.

2. Cultural Features

As one of the oldest settled areas west of Quebec the area is of great historical interest (see map of historical plaques) and there are a number of reminders of its eventful history. These include the border forts along the Niagara River and a number of well-preserved early farm buildings and houses.

Technical ingenuity of twentieth century man (as evidenced by the Welland Canal and Hydro Electric works at Niagara) has proved a great attraction for visitors, many of whom rarely have the chance to see ocean-going vessels or the way in which power is produced.

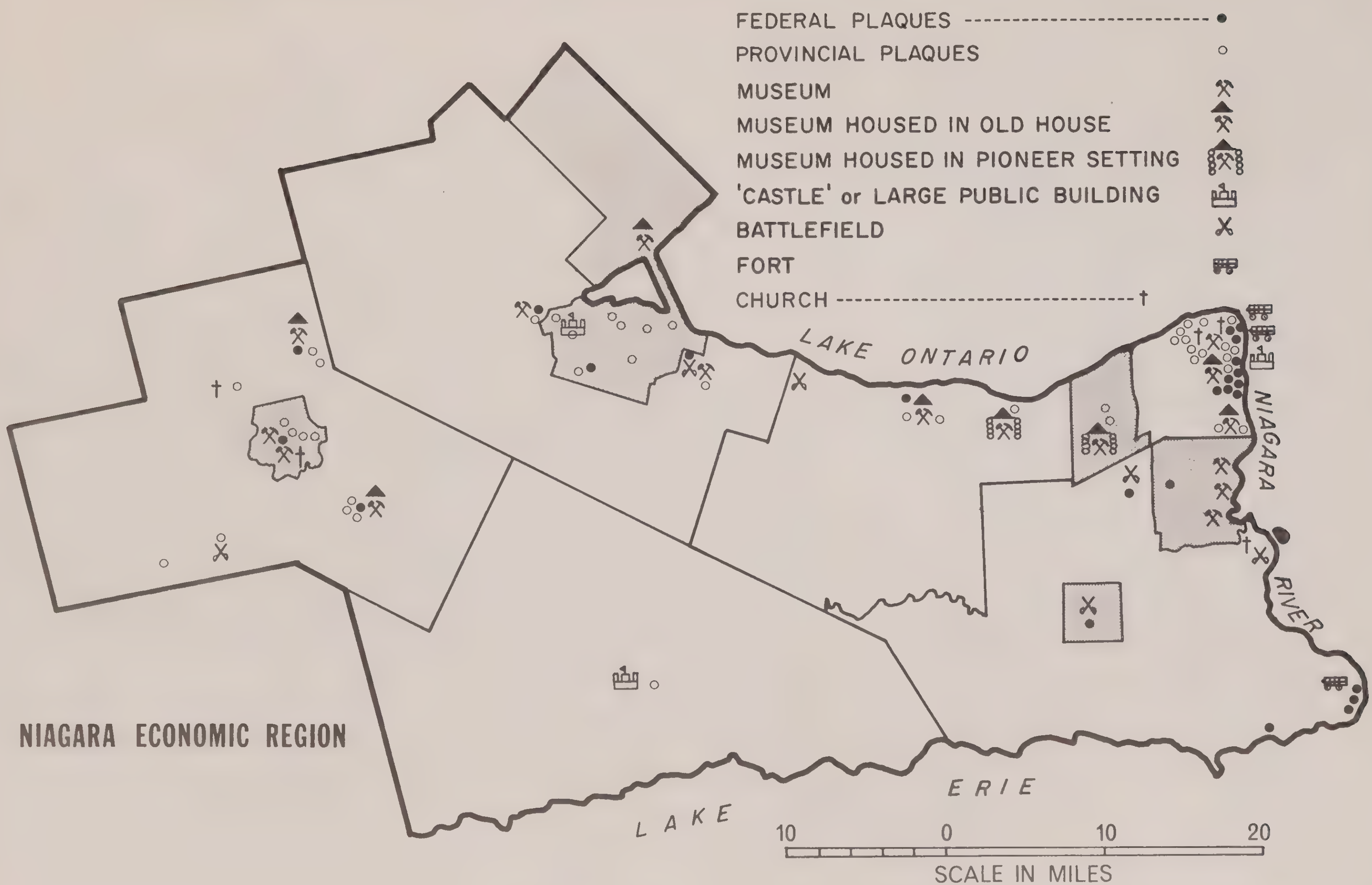
Activities of general and special interest are illustrated by a questionnaire answered by U.S. and Canadian visitors to the Region.

Activities of General Interest For
U.S. and Canadian Visitors 1965

Activity	U.S. Visitors (In per cent)	Canadian Visitors (Excluding Ontario) (In per cent)
Water Sports	3.5	4.2
Fishing - Hunting	2.6	0.8
Sightseeing	83.3	78.2
Visiting Friends & Relatives	2.7	10.7
Other General Interest	5.2	5.0
Did not state	2.7	1.1
TOTAL	100.0	100.0

Scenic, historical or scientific aspects are the strongest

HISTORICAL SITES AND MONUMENTS



NIAGARA ECONOMIC REGION

attractions to the area. The Region is not one where visitors engage in specific sports or pursuits to the exclusion of all others, but rather one of general interest to the sightseer.

Activities of Special Interest For U.S. and Canadian Visitors 1965

Activity	U.S. Visitors (In per cent)	Canadian Visitors (Excluding Ontario) (In per cent)
Visiting Attractions	63.6	65.1
Golfing	0.9	1.2
Boating	1.4	0.8
Historical Sites	11.6	11.1
Sightseeing Cruises	5.1	5.0
Own Cottages	0.1	-
Exhibition Festival	0.4	0.8
Antiques	0.5	0.4
Other Special Interest	4.9	4.2
Did not state	11.5	11.4
TOTAL	100.0	100.0

3. International Crossroads

The Niagara Peninsula forms a land bridge across the Southern Great Lakes System. Projecting eastward, it lies on the shortest route from many points within Up-State New York to Michigan. It is also the route used by much of Southern Ontario to reach the north-east United States. Fast modern highways have made this area easily accessible for both populated areas of Ontario and New York. Fast through-routes on both sides of the border (the Queen Elizabeth Way and Governor Thomas E. Dewey Thruway), ensures that it would be frequently visited even without its considerable attractions.

Recreational Demand

Well serviced by roads, the region also lies along an axis of high population density between and within the

expanding Megalopolitan development known sometimes as 'Mississauga' or the 'Golden Horseshoe'. This is seen by some to be a proto-conurbation which in future may extend from Toronto, through Hamilton to Buffalo. The population of the area within Canada is close to three million and has been growing at a rate of over three per cent per annum. The future population of the area is seen as seven million by 1980.[2]

All these factors - easy access, close proximity to a large and growing population together with the intrinsic and cultural character of the region - combine to create a very heavy pressure on the recreational resources of the area. An illustration of this pressure is the Department of Highways' statistics which show that between one and two-thirds of the total trips made in the area were made for recreational and social purposes.

Origin of Visitors

Studies by the Departments of Highways and Tourism and Information have shown that the proportion of American visitors in the Region is one of the highest in the Province. The following table shows the relative proportions of American to Canadian visitors. The Niagara Region was divided for survey purposes into two halves. "East of Lake Erie Area" and the "Niagara River and Lake Ontario Area". Unfortunately, only the lakeside townships were included within these areas. Inland townships were considered separately but as these are relatively unimportant from the recreational point of view, they have been ignored.

Per Cent of Canadian and American Visitors to the Niagara Region, 1964

	U.S.	Canadian
Day Visitors to Prov. Parks (Rock Point)	16.4	83.6
Campers at Prov. Parks (Rock Point)	42.9	57.1
Cottage Owners) Lake Erie	47.0	53.0
) Niagara R. & Lake Ont.	5.8	94.2
Guests at Commercial Resorts)		
Lake Erie	69.2	30.8
Niagara R. & Lake Ont.	80.5	18.7

Cottage ownership is predominantly Canadian along the

2. Toronto City Planning Board A New Plan for Toronto, 1966.

Lake Ontario coast, while on the Lake Erie coast the balance between American and Canadian ownership is almost even. Day visitors to the only Provincial Park in the Region, (Rock Point) tend to be mainly Canadians; 67.3 per cent of whom come from the Niagara Region. Camping at the Park is, however, a more international pastime with American visitors accounting for almost half the total; only 37.1 per cent of the campers originate in the Niagara Region.

The Niagara Region is much more popular as a commercial resort with Americans than Canadians. In the two survey areas American visitors predominate. (In the Niagara River and Lake Ontario resort area they account for over 80 per cent of the visitors staying in commercial accommodation).

Referring to the more detailed tables in the appendix, it can be seen that Canadian guests to the Lake Erie area are local people; only 7.8% are from outside the Niagara area, but within Canada. The Canadians who stay in the Niagara River and Lake Ontario Area are drawn widely from the whole of Ontario and Canada (only 0.7 per cent of the Niagara Region). In absolute terms the Niagara River and Lake Ontario Area was more than twice as popular with visitors as the Lake Erie Area (the absolute figures here are only comparative as the study was based on a sample).

International entries of non-residents

Statistics provided by D.B.S.[3] show points of entry and exit of visitors into Canada. Unfortunately, these are not separated as to the trip purpose, (i.e. these figures include business, social and shopping journeys as well as recreational visits). Almost half of all exits and entries of non-residents to and from Ontario are made at the Niagara Frontier crossing. The percentage of the province's exits made here is slightly higher than the percentage of entries (perhaps indicating the desire on the part of the visitor to end their stay in Ontario with a look at the Falls).

Border crossings in both directions by non-residents have risen considerably over the past five years, (32 per cent for entries and 32.9 per cent for exits) though the Niagara borders share the total Ontario crossings has declined steadily, if slowly (from 42.2 to 41.2 per cent for entries and from 42.6 to 42 per cent for exits).

3. D.B.S. Border Crossing 66-201 Annual.

Short visits, two days or less, have increased in popularity. Visits for this duration accounted for 61.8 per cent of the total in 1960 and this figure rose steadily to 63.5 per cent in 1964.

The relative popularity of exit points for those entering the region from the United States has changed little since 1960. The largest group, 83.4 per cent, cross and return by the Niagara Frontier. 10.6 per cent travel along the shore of Lake Erie to exit by the Detroit Frontier. A small group leaves the province by the St. Lawrence (2.8 per cent).

Callers at the Department of Tourism and Information Reception Centres, giving the Niagara Region as their destination, provide support for the D.B.S. figures. (In this case, however, their recreational purpose in visiting the region is more certain). The majority of visitors to the Region cross the border at the Niagara River, though appreciable numbers who visit the reception centres along the St. Lawrence and Windsor Frontiers give the Niagara Region as their destination (12.07 and 36.11 per cent respectively).

The origin of American visitors to the Region in the table below is of interest as it confirms the impression of the wide drawing power of the Region.

Origin of U.S. Visitors in Per Cent, 1964

Michigan	27.7
New York	12.3
Ohio	7.7
Pennsylvania	7.1
Illinois	5.1
New Jersey	4.6
Massachusetts	3.4
Indianna	2.5
Minnesota	1.0
Other U.S.	15.4
Total	100.0

Facilities for Visitors

The estimated value of establishments catering for overnight tourists amounted to $44,131,350 in 1965 and represents the investment placed in a total of 415 establishments containing 9,422 units. The table below indicates the changes which have occurred over the past 10 years.

Tourist Establishments 1955 - 1965

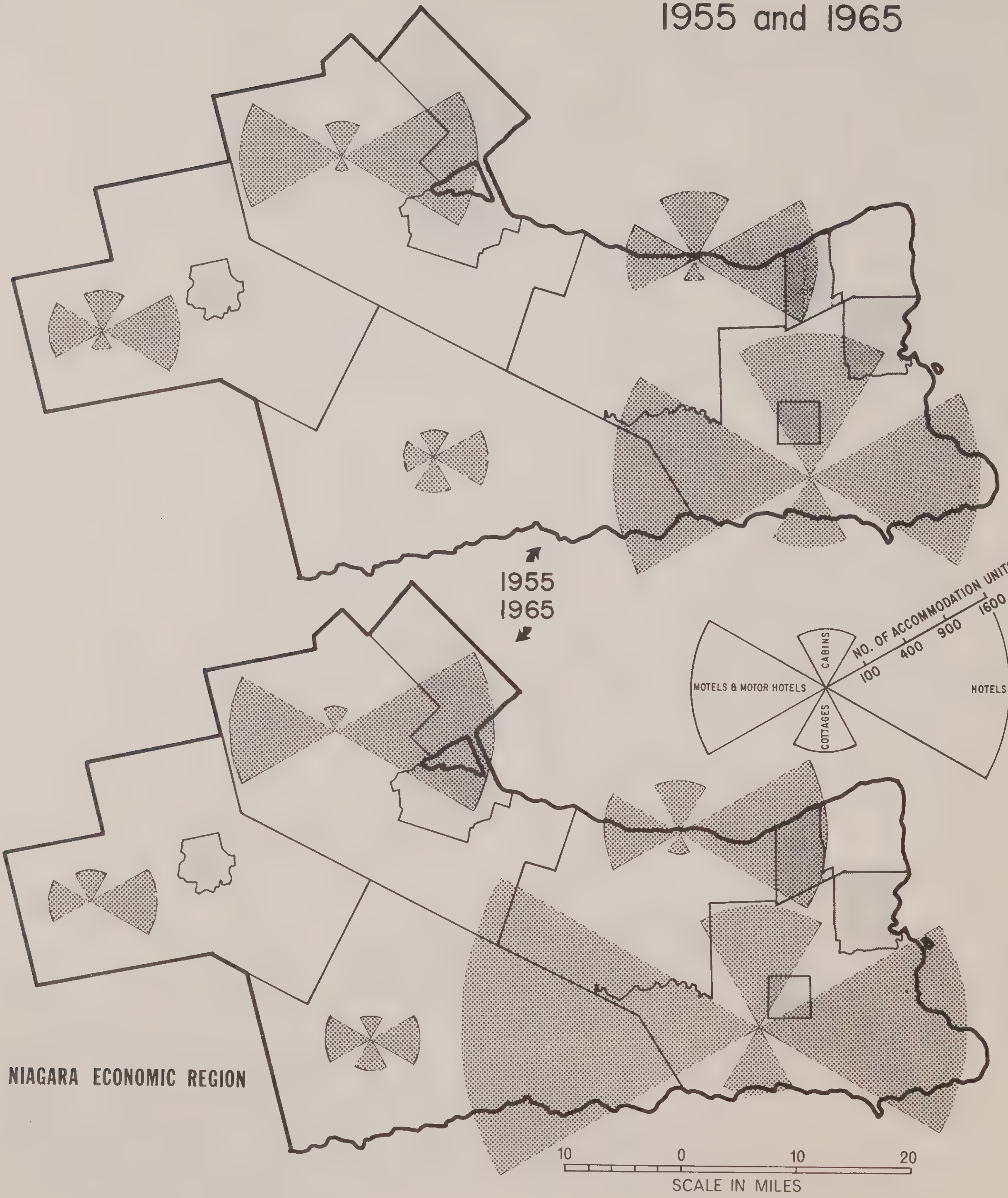
	1955				1965			
	Establishments	Units	Average Size	Estimated Value ($000's)	Establishments	Units	Average Size	Estimated Value ($000's)
Brant	24	250	10.4	790	25	534	21.3	2,389
Haldimand	27	179	6.6	353	28	309	11.0	919
Lincoln	47	496	10.5	2,032	34	600	17.6	2,245
Welland	278	3,740	13.5	13,802	285	6,876	24.1	33,908
Wentworth	61	620	10.1	3,237	43	1,103	25.6	4,669
Total	437	5,285	12.1	20,215	415	9,422	22.7	44,131

Liquor-Licensed Establishments 1955 and 1965

	1955				1965			
	No. of Establishments	Units	Average Size	Estimated Value ($000's)	No. of Establishments	Units	Average Size	Estimated Value ($000's)
Brant	8	294	36.7	2,499	6	203	33.8	1,725
Haldimand	14	162	11.5	1,377	14	171	12.2	1,453
Lincoln	23	693	30.1	11,917	29	1,048	36.1	18,032
Welland	45	1,251	27.8	15,012	55	2,016	36.6	26,208
Wentworth	22	860	39.1	9,720	23	1,170	50.8	13,970
Total	112	3,260	29.1	40,525	127	4,608	36.3	61,389

TYPE OF ACCOMMODATION

1955 and 1965



NIAGARA ECONOMIC REGION

The number of establishments has increased little in the past ten years - (By a total of only nine in Lincoln, Brant and Haldimand combined.) In the Region as a whole there was a 5 per cent decline (22 establishments). Not included within these figures are the estimated values of establishments with liquor licenses which amounted to $61,399,000 and which totalled 127 establishments and 4,608 units.

Some of the decline in tourist establishments may well be a result of the licensing of existing premises (i.e. they are registered now as liquor licensed establishments and not as tourist establishments). Despite the decline in the numbers of establishments however the number of units and values has risen greatly. The growth of accommodation combined with a reduction in numbers of establishments implies growth in the scale of operations. The average size of establishments almost doubled in 1955 from 12.1 units to 22.7; average size of hotels grew from 29.1 to 36.3 units. In all counties except one, liquor-licensed establishments and all others increased in average size in this decade. Average size of establishment was largest in Wentworth and Welland, and smallest in Haldimand. The number of tourist establishments in Wentworth County reflects the size of hotels in Hamilton, which cater perhaps more to business than to tourism.

The growth in tourist units has been concentrated in Welland and Wentworth. Throughout the rest of the Region, the number of accomodation units has experienced only slow growth (in Haldimand the number of units available in 1965 was less than in 1960). Business opportunities in this sector can therefore be considered limited to those entrepreneurs assembling the large initial capital investment. One factor limiting returns is, of course, the well-known seasonality of the trade but under-use is not restricted to the winter months. The table below indicates the occupancy percentage recorded during June 1966 from a sample of establishments within the Region.

Occupancy Rates, June 1966

	Rental Units Sampled	Number Elsewhere	Total Occ.	Hotel Occ.	Lodge Occ.	Motel Occ.	Camp-sites	Cottages	Cabins	Other
Ontario	10,393	458	50	58	49	52	71	40	33	20
Niagara-Iroquoia	1,422	43	48	53	-	51	-	-	39	2

Summer Properties, 1965

Rural Hydro Operating Areas	No. of Summer Commercial Customers	Other Summer Customers	Commercial % Total Rural Customers	Other Summer Customers-% Total
Beamsville	8	217	0.1	2.3
Brantford	6	17	0.1	0.4
Cayuga	61	2,653	0.7	32.9
Dundas	-	3	-	0.4
Stoney Creek	-	107	-	1.4
Welland	82	1,435	0.9	15.4
	157	4,422		

Cottages

Lake Erie is one of the more important cottage areas of Southern Ontario, and much of the lakeshore is occupied by cottage lots. The waters of Lake Ontario are cooler and its shores are less frequented for this reason. Cottages in the Region are generally small and prices lower than those on the Canadian shield - (Muskoka, Parry Sound, etc.). Hydro statistics allow a fairly complete examination of the numbers of cottage properties. The two hydro districts along Lake Erie, Cayuga and Welland, contain over 90 per cent of the summer cottages and summer businesses within the Region. Origin of the cottage owners has been previously indicated. Cottages are owned in the main by dwellers within the Region or by those just outside. Many of the large numbers of American cottage owners are Buffalo residents.

Camp Sites

Camping has increased greatly in popularity in the past decade. Commercial sites licensed in the Province have increased from fewer than 2,000 in 1958 to over 15,000 in 1965. In 1965 thirty-four sites were listed in the Region by the Department of Tourism and Information, providing a total capacity of 2,271 units. Almost half of the total number of establishments and over 55 per cent of the acreage in capacity was concentrated in Welland County. In general, sites in the Region can be grouped into four clusters (see map).

Lake Erie and the Lower Grand River
Niagara Falls and vicinity
Brantford and vicinity
Niagara escarpment near Carlisle

Camping Facilities, 1965

County	No. of Establishments	No. of Units	Average
Brant	4	188	163
Haldimand	6	145	64
Lincoln	4	173	52
Welland	15	1,251	842
Wentworth	5	454	302
	34	2,211	1,373

Parks

A number of authorities are engaged in the provision of open space and recreational facilities within the Region. Of prime importance is the Niagara Parks Commission system of 3,500 acres and over 13 million visitors per year. This system has often been commended as a fitting and worthy entrance to Ontario and Canada.

Park provision in the rest of the Region has not, however, reached these standards. One provincial park exists at Rock Point (187 acres) and this was visited by 23,273 visitors in 1965. Conservation authorities of the Region (Niagara and Grand River) provide a total of four areas set aside for recreational purposes, which were visited by over 200,000 people in 1965.

The municipal parks are many in number, but as these serve more immediate local needs, discussion of all but two have been omitted. The Hamilton Botanical Gardens (1,900 acres) is a well known and notable municipal park; Haldimand County Park (90 acres) was developed under agreement with the Province under the Parks Assistance Act. This Act was designed to help local municipalities set up parks similar in function to the provincial parks by providing camping sites and picnic areas. Haldimand County is the only municipality in the Region which has taken advantage of the financial assistance of this Act.

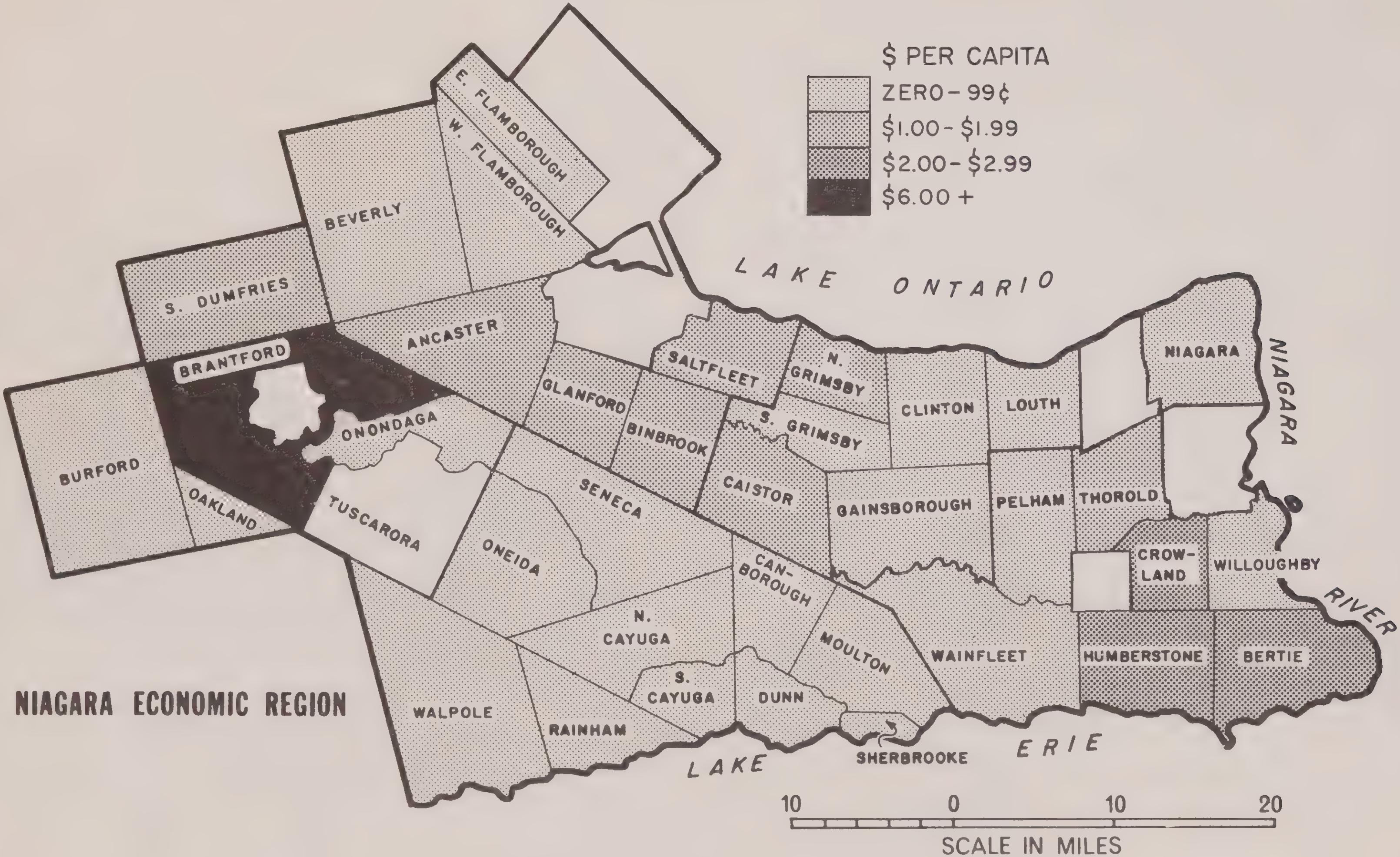
Municipal Expenditure

The two maps included here on expenditure have been derived from Municipal Statistics 1960 to 1963 inclusive.

Included within expenditure in this category was the provision of such items as pools, golf courses, community halls, libraries, museums, parks and playgrounds.* Not included were grants made by provincial bodies for specific recreational developments (such as grants under the Parks Assistance Act). The maps represent therefore expenditure made by each municipality on behalf of its own residents for local usage. An examination of these statistics immediately highlights the basic differences between rural and urban expenditure on these facilities.

* The full list reads recreational services: community centres and halls; golf courses, pools, beaches, baths, rinks, arenas, amusement parks and playgrounds; community services; cemeteries, libraries, museums, art galleries, exhibition parks and fairs, market and weigh scales.

MUNICIPAL EXPENDITURE ON RECREATION AND COMMUNITY SERVICES
TOWNSHIPS, 1961 - 1964



NIAGARA ECONOMIC REGION

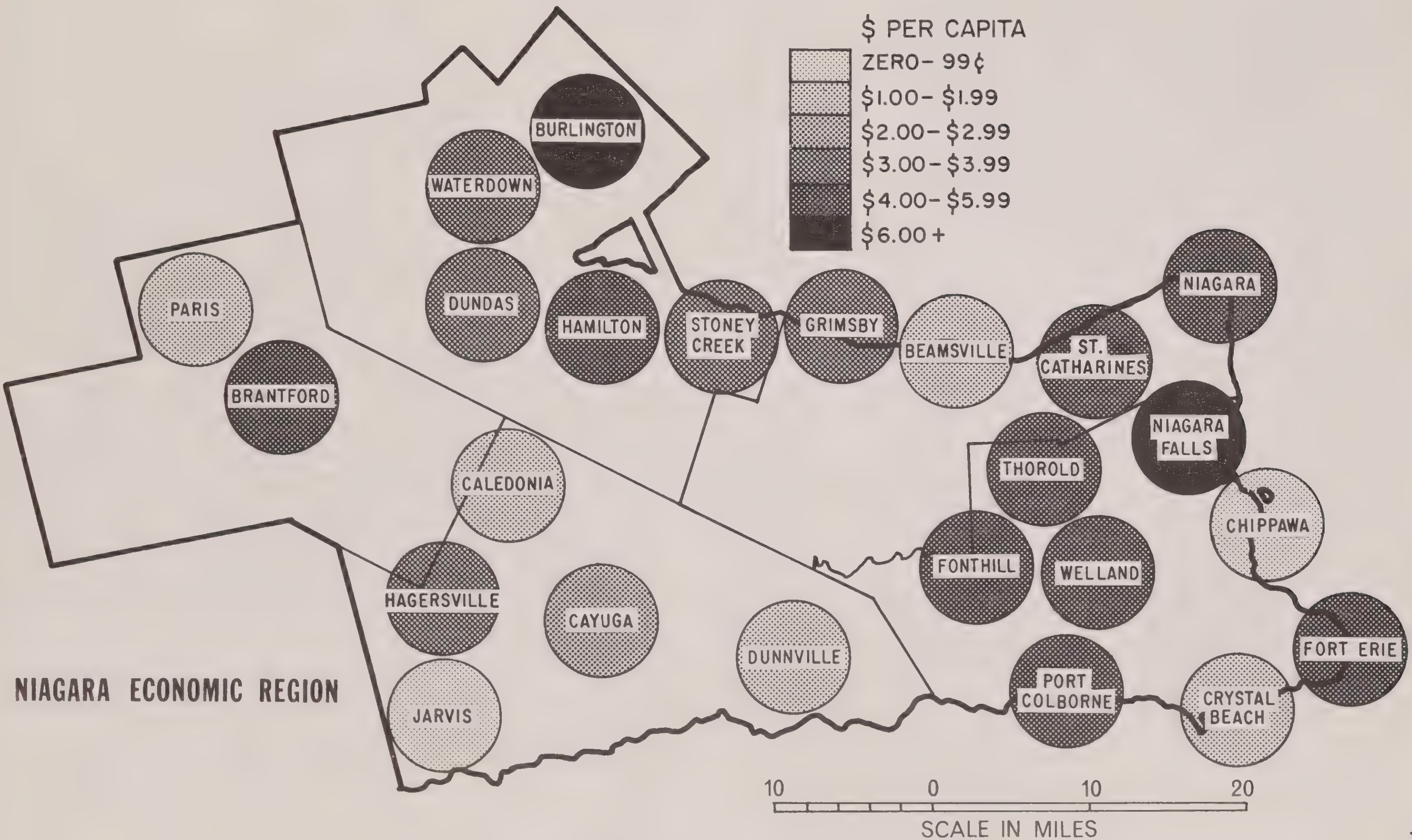
Municipal Expenditure On
Recreation And Community Services,
1961 - 1964

	$ Per Capita
BRANT	
Brantford	5.86
Paris	1.97
Brantford	6.85
Burford	0.51
Dumfries S.	1.02
Oakland	0.71
Onondaga	0.43
BURLINGTON	8.34
HALDIMAND	
Caledonia	1.94
Dunnville	1.93
Cayuga	2.09
Hagersville	3.89
Jarvis	0.82
Canborough	0.31
Cayuga N.	0.94
Cayuga S.	0.16
Dunn	0.22
Moulton	0.22
Oneida	0.63
Rainham	0.43
Seneca	0.63
Sherbrooke	0.73
Walpole	0.39
LINCOLN	
St. Catharines	5.53
Beamsville	1.99
Grimsby	3.44
Niagara	4.76
Caistor	1.19
Clinton	-
Gainsborough	-
Grimsby N.	1.05
Grimsby S.	0.23
Louth	0.99
Niagara	0.14

	$ Per Capita
WELLAND	
Niagara Falls	12.29
Welland	5.73
Fort Erie	4.66
Port Colborne	5.36
Thorold	5.18
Chippawa	0.74
Crystal Beach	1.70
Fonthill	5.05
Bertie	0.84
Crowland	2.67
Humberstone	2.30
Pelham	0.14
Thorold	2.15
Wainfleet	1.29
Willoughby	0.77
WENTWORTH	
Hamilton	5.29
Dundas	3.67
Stoney Creek	3.73
Waterdown	3.05
Ancaster	1.51
Beverly	0.53
Binbrook	1.10
Flamborough E.	0.15
Flamborough W.	0.61
Glanford	1.14
Saltfleet	1.91

Source: Municipal Statistics, Department of Municipal Affairs, 1961, 1962, 1963, 1964.

MUNICIPAL EXPENDITURE ON RECREATION AND COMMUNITY SERVICES INCORPORATED CENTRES, 1961-1964



NIAGARA ECONOMIC REGION

A large part of the discrepancy is understandable; urban dwellers need and expect open space whereas in rural areas this is "naturally" part of the environment. Similarly such items of expenditure as libraries, museums and art galleries are generally considered to be urban facilities and are frequently used by those who live in surrounding areas. Urban taxes are higher and the provision of services is consequently greater.

Problems of who pays for the recreational services become more acute when the population of one area starts to use the facilities of those in another. This is generally the case with many parks provided by conservation authorities. In the Niagara Region this problem is most evident in the Lower Grand Valley which lies within the recreational hinterland of Hamilton. This city lies however in the ambit of a different conservation authority and so Hamilton contributes little to the development and upkeep of the Grand Valley's recreational facilities.

Recreational Character of the Niagara Region

Having looked at the development of recreational facilities, an attempt should be made to indicate the recreational characteristics of the Region.

First, the Region is of international importance as being recreationally and scenically unique. As a result it attracts visitors from many parts of Canada and the United States making tourism one of the Region's prime resources and industries. Facilities for the tourist have grown up around the Niagara River and the Falls and consequently Welland County, and to a lesser extent Lincoln County, are extremely important in any measurement of the tourist industry. Overlapping with the international sector in terms of facility use, are the recreational demands of the Region and its surrounding areas. This demand makes itself felt in the growth of cottage areas, demand for picnic and bathing areas, for camping sites and regional parks, skiing areas and marinas, pleasant drives and lookout points. In many ways, therefore, the Niagara Region has perhaps looked upon itself too much as an international resort whilst forgetting its own adjacent areas' demands for facilities of a more mundane and not so spectacular type. The recreational character of the Region may be summarized briefly as follows:

(a) The Lake Erie Cottage Belt - This area contains a high concentration of small private summer cottages along the shore that function mainly as a blue collar recreational district with visitors drawn from Hamilton, St. Catharines and Buffalo. There are two small public parks that total 329 acres, a degree of commercial development around Crystal Beach, and some boating facilities, particularly around the Grand Estuary and Port Colborne.

(b) Lake Ontario Shore - This is a less important cottage area. Public access is severely limited by private or military bodies, but is of great importance to large numbers of nearby urban dwellers.

(c) Niagara Escarpment - This part is little used recreationally. There is a Conservation Area at Ball's Falls but no other public parks, the Bruce Trail appeals to the more active, some skiing developed on the dip of the escarpment at Cedar Springs and in Hamilton.

(d) Grand River - The river is utilized for water skiing and boating in certain sections. There are some small camp sites and a conservation park at Byng.

Present and Future Needs

The foregoing pages have indicated the demand and supply of recreational services. What is the balance between the two forces and how is this likely to change in the future? Professor Norman Pearson, authority on Recreational Land Use Planning and author of the N.R.D.A.'s survey of the "Regional Lakefront Problems" has estimated that an additional 175,000 acres of land will be needed in the Province within the next generation i.e., twenty-five years. He estimates that this will entail raising of between $350 and $860 million over the next decade. One hundred thousand acres are required for the future and another 75 thousand are needed to correct present deficiencies. The bulk of land required lies within 40 to 50 miles of the urban population along the axis extending from Ottawa to London.

How is the Niagara Region which lies in the centre of this axis tackling the problems of skyrocketing demand? The inadequacy of parkland in Welland and Lincoln Counties was pointed out in the Niagara Region Local Government Review. Three cities, Welland, St. Catharines and Niagara Falls, provide within their bounds 610 acres of parkland or three acres per thousand residents. If the commonly

held standard is ten acres per thousand then "On this standard the municipalities have not been especially generous or farseeing, even for their own residents."

Because the parkland provided by the Province and the Conservation Authorities has been extensive there has perhaps been less concern on the part of the local municipalities to raise their own standards. Availability of parkland should not be judged solely in relationship to the population of the Niagara Region. It is probably true to say that there is no other part of Canada where urban complexes generate such a large demand for recreational facilities.

The recreational problems of the Region have raised a number of important questions of Provincial and Municipal policy. These problems and their implications have received considerable study by experts in the field of recreational research.

The tremendous pressures of urban growth have given rise to serious land-use conflicts. If the past experience in the resolution of these conflicts has not been particularly rewarding, it may be that the wider implications of recreational planning in regional and international, have not been sufficiently considered.

Norman Pearson stressed the need for a Regional Plan to govern development and plan the land use of Lake Ontario. Certain points of this report might bear reiteration:

"The total area of the N.R.D.A. has only 8.15 miles of shoreline for the public, about one inch per person."

"Basic to the problem is a concerted attack by a single strong regional agency to clean up pollution and control the erosion."

"The acquisition of about 1,360 acres as a minimum for lakeshore parks in the area; as this is far beyond the resources of the small municipalities it must be done on the basis of Provincial action and financed over a long period of time."

Future Program

A number of proposals for the development of recreational facilities is current.

Two Provincial parks are being developed on the Lake Erie shore. At Selkirk 125 acres and in Dunn Township 277 acres have been purchased by the Department of Lands and Forests, for Provincial parks.

A proposal for a scenic drive along the crest of the Niagara escarpment is currently being studied. The future development of the Lower Grand Valley as a recreational area is under discussion by such interested parties as the City of Hamilton and Niagara-Iroquoia Tourist Association.

The creation of a living museum in the Town of Niagara-on-the-Lake, proposed by N. Pearson and the O.E.C. is also under study. This would provide for a protection and restoration of the historic buildings in the town.

Also proposed is an examination of alternative uses for the military reserve at Niagara-on-the-Lake. *

The twinning of the locks and new sections of the Welland Canal will raise possibilities of the alternative uses to which the abandoned section can be put.

* N. Pearson. Survey of Regional Lakefront Problems, N.R.D.A., July 1963

SECTION VIII

Municipal Finance

Municipal authorities in Ontario make more than 25 per cent of the expenditures made by all levels of government in Ontario. Their expenditures on such items as education, welfare, roads and recreation and their decisions on planning greatly affect the standards of living of their inhabitants.

The Province provides approximately 30 per cent of the revenues of the Niagara Region's municipalities. For some municipalities it provides over 50 per cent of revenues and in one case (Caistor) it provides 67.8 per cent. Municipal Financial positions are therefore, of considerable importance to the local, provincial and national economies.

At least five elements have to be considered in determining the relative strength of a municipality's finances. These include its assessment base, the distribution between industrial, commercial and residential assessment and taxation, the extent to which the community is in debt, the amount of capital already invested in the community and the ability of the inhabitants to afford further increases in municipal taxation.

1. Taxable Assessment

The major source of municipal revenue in the province is the taxation of landed property. The assessed value of land varies in both absolute and per capita terms from county to county and municipality to municipality. In 1965 Haldimand County had the lowest per capita taxable assessment ($1,406) while Welland had the highest ($1,972). Of course, averages conceal a great deal; within Haldimand County the Town of Cayuga South has a per capita taxable assessment of $946 while Sherbrooke has $5,448. In Welland, Bertie Township has $2,771, while the Town of Thorold has less than half that, ($1,380).

The irregular assessment practices* which exist in the Region reduces the validity of the assessment base as an indicator of municipal financial strength. Municipalities in Ontario normally assess at about 30 per cent of market value but many assess considerably above or below that mark. Brantford assesses at 43 per cent of market value

* Niagara Local Government Review, Report of the Commission, Department of Municipal Affairs, Toronto, August, 1966-p.42.

while in the same county the Township of Burford assesses at 20 per cent. Equalized assessment, where assessment is adjusted to a provincial norm, is a more meaningful figure. Burford has an equalized per capita assessment of $1,952 per capita up from $1,301 while Brantford has an equalized assessment of $1,505 down from $2,157. It follows that Brantford's total assessment falls nearly $40 million while Burford's rises a little over one million. From the assessment standpoint, then, Brantford is worse off than one might have initially thought.

2. The Residential to Commercial-Industrial Ratio

A great deal of emotion is attached to this concept. Many believe that a municipality with more than 60 per cent of its assessment in residential use is on the brink of financial disaster. As the Niagara Region Local Government Review points out, such a notion is untrue.* Residential property can have high value. In Haldimand County, the Town of Dunnville has a per capita assessment of $1,420, and a 54-46 ratio, while Rainham Township has a ratio of only 86-14 but a per capita assessment of $1,689. Yet the concept does have some validity. First, industrial assessment requires fewer services such as education and recreation and thus costs the municipality less. Second, industrial land can better afford taxes than residential land. Finally, the higher the proportion of industrial land the lower will be the burden of increased taxation on residential land. A municipality such as Oakland with a 91.9 ratio and a per capita tax levy of $67.14, of which $64.14 is on residential land, would have to raise its per capita residential tax $9.10 to increase its revenue by only $10. The City of Brantford whose ratio is 59.41 would have to raise its residential tax only $4.10 per capita to achieve the same result.

A 60-40 ratio prevails in the Region as a whole. Only two of the five counties, (Wentworth and Welland) and eleven of the 59 municipalities actually do achieve this ratio; seven of these are in Welland County, two in Haldimand, one each, (Brantford and Hamilton) in Brant and Wentworth and none in Lincoln. The average municipal per capita residential tax in the Region is $80.89. Many municipalities fall below this mark, but there is no evidence of a necessary relationship between tax levels and industrial assessment in the Region. Nevertheless, it appears that those municipalities with high residential assessments either levy higher residential taxes or simply spend less than those municipalities which have high industrial assessments.

* Niagara Local Government Review, <u>Report of the Commission</u>, p. 44.

3. Debt

Per capita debt varies considerably from one municipality to the other. Brant County municipalities, for example, average $211.38 of debt per capita but South Dumfries has a per capita debt of only $39.48, while Brantford has $245.76.

Similar variations are evident in the figures for debt as a per cent of assessment. In Haldimand County as a whole, debt represents nine per cent of assessment; in Cayuga South it is but 2.8 per cent while in Hagersville it is 11.3 per cent.

4. Existing Capital Investment

A municipality may have a high per capita debt, high taxation and an "unbalanced" residential/industrial assessment and still be in good financial position if it already has many of its services and/or if it is not likely to need any more. Unfortunately, as the section on water pollution has shown, some municipalities in the Region do not have adequate treatment facilities and must look forward to heavy expenditures which they may not be able to afford.

Apart from the comments in the preceding sections on recreation, water and other services, the only way to compare municipal services is by expenditure. Even where uniform standards might be most expected, widely varying per capita expenditures, would suggest otherwise. Welland County spends $63.14 on education per capita; Haldimand County spends $41.44. Expenditures on recreation vary from $8.66 per capita to nil in a number of towns. Public Welfare receives $11.17 in Wentworth County and $5.77 in Brant. Public Works expenditures can normally be expected to vary. Haldimand County finds it necessary to spend $64.65 per capita while Wentworth spends but $10.81.

5. Ability to Pay

The above paragraphs have all dealt with ability of municipalities to tax for services. The most important factor in ability to pay is the income of the people and organizations within the Region. Corporations and industries probably can pay more than individuals if only because many can shift the burden of taxation onto the consumer and because

(their municipal taxes are deductible). Only a few of the municipalities in the Region rely heavily on taxes on commercial and industrial property. Most have to depend on residential taxes and the capacity to pay these varies directly with income. It was pointed out earlier that the Region's estimated personal income for 1963 compared favourably with that of the Province as a whole. Within the Region, personal incomes in Haldimand were substantially lower, than the average, while Wentworth's tended to be higher. It follows that Wentworth's municipalities should be in a superior financial position relative to municipalities in Haldimand in terms of expenditure; this is very much the case.

This section has attempted to outline the elements that contribute to a strong municipal financial position. Implicit is the assumption that a sound financial position is a good thing but no attempt has been made to weigh financial capacity against service levels. In the long run of course, these must converge.

A second and related purpose has been to view needs and resources in an economic context. Earlier sections have tried to throw light on the reasons for varying economic strength within the Region. Clearly there is a positive correlation among service levels, the performance of the economy and a municipality's financial position.

Summary

An important theme of the preceding sections has been the importance of integration to the economy. The six main urban areas have been shown to have more industry and more productive industry. Both in absolute terms and in terms of their share of the population they have larger labour forces and more services; more educational facilities and more hospitals; higher incomes, greater value added and greater output. Their ports are the foci of the transportation system.

The point is not that it is "better" to live in the city but that for purposes of economic activity, when masses of people, goods and services are brought together the economy is better able to produce a wide variety of just these goods and services. Conversely, those areas without concentration of economic activity appear to be less well off in a material way. The chart on the opposite page is testimony to this point.

Lest it be thought that amidst this urban euphoria the Region has no problems, it is only necessary to look at water pollution, the state of recreational facilities, the position of municipal finance, the problems of agriculture, the fact that a third of the families in the Region had a total income of less than $4,290 in 1961 or that four per cent of them lived in houses in need of major repair or that 27 per cent lived in overcrowded homes, that is, buildings with more than one person to a room.

This report has not tried to establish a value system. It is for the people of the Niagara Region to decide what their problems are and how they wish to cope with them; to determine whether or not solutions might involve too much public expense, too much interference with private initiative or too much regulation.

Indicators of Family Living Standards, Niagara Region, 1961

Indicator		A - Burlington		B - Niagara			Niagara Region	Ontario
		Brant	Wentworth	Haldimand	Lincoln	Welland		
Average family income	$	5,412	6,092	4,896	5,762	5,671	5,838	5,868
Median family income	$	4,722	5,408	4,360	5,055	5,124	5,188	5,109
Highest income of lower third of income groups	$	3,852	4,480	3,516	4,263	4,247	4,290	4,110
Per cent of families with one or more televisions	%	94.0	94.0	91.5	92.2	95.5	94.0	92.0
Per cent of total families with one or more cars	%	82.2	80.6	87.8	86.8	84.7	82.9	80.9
Per cent of total families living in dwellings with 1 or more persons per room	%	25.0	27.6	23.6	26.4	27.0	26.9	28.4
Per cent of dwellings in need of major repair	%	6.6	3.3	6.3	3.6	4.3	4.1	4.5

For Further Reading:

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Statistical Appendices

A Note On Sources

Much of the material in this report derives from publications of the Dominion Bureau of Statistics. The Census of Canada, in particular, provides a wealth of information.

Many of the Agricultural statistics were compiled from the Ontario Department of Agriculture's annual publication, Agriculture. Statistics on secondary industry were provided by D.B.S. Those on the tertiary sector were taken from the Census, the reports of banks and trust companies. The reports of the Ontario Water Resources Commission, and the Ontario Hospital Services Commission, were also useful. For Municipal Statistics, the Annual Reports of Municipal Statistics prepared by the Department of Municipal Affairs were invaluable.

Population Projections, By County And Major Centres, Niagara Region, 1961 and 1971 to 1986

	1961	1971	1976	1981	1986
A - Burlington					
Brant	83,839	89,700	93,900	98,300	101,000
Brantford (Urban area)	56,741	66,000	71,300	77,200	83,400
Wentworth	358,837	448,600	504,500	570,600	644,800
Hamilton (Metropolitan area)	395,189	497,300	556,600	624,000	700,000
Sub-total, Counties	442,676	538,300	598,400	668,900	745,800
B - Niagara					
Haldimand	28,197	30,200	31,600	33,700	35,800
Lincoln	126,674	167,000	193,500	224,800	258,000
St. Catharines (Urban area)	95,577	114,000	125,800	139,500	154,700
Welland	164,741	205,200	231,200	261,000	294,900
Niagara Falls (Urban area)	54,649	66,000	73,000	81,000	90,000
Port Colborne	14,886	16,500	17,500	18,500	20,000
Welland	36,079	44,500	49,100	54,500	60,600
Sub-total, Counties	319,612	402,400	456,300	519,500	588,700
Total, Niagara Region	762,288	940,700	1,054,700	1,188,400	1,334,500
Total, Ontario	6,236,092	7,787,500	8,753,200	9,891,300	11,166,700
Niagara Region as % of Ontario	12.2	12.1	12.0	12.0	12.0

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Total, Ontario	6,236,092	7,787,500	8,753,200	9,891,300	11,166,700
Niagara Region as % of Ontario	12.2	12.1	12.0	12.0	12.0

Urban, Rural (Farm) And Rural (Non-Farm) Population, 1961
Census, Percentage Distribution, Counties, Niagara Region And Ontario

		RURAL		
	Urban	Farm	Non-Farm	Total
A - Burlington				
Brant	63,635 (75.9)	7,974 (9.5)	12,230 (14.6)	83,839 (100.0)
Wentworth	324,341 (90.4)	8,762 (2.4)	25,734 (7.2)	358,837 (100.0)
Sub-total	387,976 (87.6)	16,736 (3.8)	37,964 (8.6)	442,676 (100.0)
B - Niagara				
Haldimand	9,454 (33.5)	8,900 (31.6)	9,843 (34.9)	28,197 (100.0)
Lincoln	94,869 (74.9)	12,180 (9.6)	19,625 (15.5)	126,674 (100.0)
Welland	133,658 (81.1)	6,415 (3.9)	24,668 (15.0)	164,741 (100.0)
Sub-total	237,981 (74.5)	27,495 (8.6)	54,136 (16.9)	319,612 (100.0)
Total, Niagara Region	625,957 (82.1)	44,231 (5.8)	92,100 (12.1)	762,288 (100.0)
Total, Ontario	4,823,529 (77.4)	505,699 (8.1)	906,864 (14.5)	6,236,092 (100.0)

Town of Burlington - n.a.

Percentage Distribution Of Immigrant Population, Counties, Niagara Region And Ontario, 1961

	Other Canada (Excluding) (Ontario)	United Kingdom	Other Commonwealth Countries	United States	Germany	Italy	Poland	U.S.S.R.	Other Countries	Total
A - Burlington										
Brant	5,346	7,778	172	1,106	586	816	1,255	536	3,758	21,353
%	25.0	36.4	0.8	5.2	2.8	3.8	5.9	2.5	17.6	100.0
Wentworth	29,931	42,553	894	4,341	6,262	13,747	6,360	5,786	22,321	132,195
%	22.6	32.2	0.7	3.3	4.7	10.4	4.8	4.4	16.9	100.0
Sub-total	35,277	50,331	1,066	5,447	6,848	14,563	7,615	6,322	26,079	153,548
%	23.0	32.8	0.7	3.5	4.5	9.5	4.9	4.1	17.0	100.0
B - Niagara										
Haldimand	1,211	1,312	33	328	140	123	149	149	1,477	4,922
%	24.6	26.7	0.7	6.7	2.8	2.5	3.0	3.0	30.0	100.0
Lincoln	12,187	10,898	216	1,853	2,175	1,975	3,025	4,638	8,702	45,669
%	26.7	23.9	0.5	4.1	4.8	4.3	6.6	10.1	19.0	100.0
Welland	15,155	11,471	311	4,859	1,516	9,176	1,920	1,458	10,087	55,953
%	27.1	20.5	0.6	8.7	2.7	16.4	3.4	2.6	18.0	100.0
Sub-total	28,553	23,681	560	7,040	3,831	11,274	5,094	6,245	20,266	106,544
%	26.8	22.2	0.5	6.6	3.6	10.6	4.8	5.9	19.0	100.0
Total, Niagara Region	63,830	74,012	1,626	12,487	10,679	25,837	12,709	12,567	46,345	260,092
%	24.5	28.5	0.6	4.8	4.1	10.0	4.9	4.8	17.8	100.0
Total, Ontario	577,647	501,073	23,778	81,463	91,822	161,730	79,706	75,616	337,969	1,930,804
%	29.9	26.0	1.2	4.2	4.8	8.4	4.1	3.9	17.5	100.0
Town Of Burlington	4,287	4,811	193	892	541	211	484	299	2,907	14,625
%	29.2	32.9	1.3	6.1	3.7	1.5	3.3	2.1	19.9	100.0

Age Distribution By County and Region,
Selected Age Groups, 1961

County	0-24		25-44		45-65		65+		Total
	Total	%	Total	%	Total	%	Total	%	
Brant	37,734	45.0	21,390	25.5	16,573	19.8	8,142	10.0	83,839
Haldimand	13,154	46.7	6,496	23.0	5,501	19.5	3,046	10.8	28,197
Lincoln	57,689	45.5	34,710	27.4	23,884	18.9	10,391	8.2	126,674
Welland	76,251	46.3	45,875	27.8	30,089	18.3	12,526	7.6	164,741
Wentworth	157,446	43.9	104,811	29.2	67,507	18.8	29,073	8.1	358,837
Niagara Region	342,274	44.9	213,282	28.0	143,554	18.8	63,178	8.3	762,288
Ontario	2,831,598	45.4	1,749,039	28.1	1,147,382	18.4	508,073	8.2	6,236,092

Population By Age Group,
Niagara Region and Province of Ontario,
1961 Projected to 1986*

	Region					Ontario				
Age Groups	1961	1971	1976	1981	1986	1961	1971	1976	1981	1986
0-4	87,576	106,000	129,300	153,200	169,800	740,193	913,700	1,097,600	1,302,800	1,474,100
5-9	82,763	91,800	105,900	129,200	152,700	674,519	805,300	911,200	1,094,000	1,296,200
10-14	73,776	90,200	93,200	106,900	130,200	593,037	759,900	815,200	918,800	1,102,200
15-19	53,866	85,300	91,700	94,500	108,200	436,883	694,300	771,900	825,200	928,700
20-24	44,293	77,700	88,300	95,000	97,600	386,966	624,700	719,200	797,900	850,600
25-29	48,375	59,000	80,600	91,500	98,200	422,651	477,900	647,100	743,500	822,200
30-34	55,545	49,300	61,200	82,700	93,700	459,825	426,400	492,900	662,800	759,800
35-39	59,605	52,200	50,500	62,200	83,900	469,312	452,500	435,600	501,600	671,600
40-44	49,757	58,000	52,900	51,000	62,600	397,251	477,200	457,000	439,100	504,500
45-49	45,266	60,400	58,200	52,900	51,000	360,749	475,200	477,900	457,100	438,700
50-54	38,332	49,500	59,900	57,600	52,400	309,795	393,700	469,700	472,000	451,100
55-59	32,429	43,600	48,200	58,300	56,000	258,327	346,300	382,900	456,600	458,600
60-64	27,527	35,400	41,500	45,900	55,500	218,511	285,700	329,000	364,200	434,300
65-69	22,630	28,300	32,600	38,300	42,400	180,063	224,800	262,200	302,400	335,400
70-74	18,480)					146,322)				
75-79	12,212)	54,000	60,700	69,200	80,300	97,734)	429,900	483,800	553,300	638,700
80-84	6,245)					53,466)				
85+	3,611)					30,488)				
Total	762,288	940,700	1,054,700	1,188,400	1,334,500	6,236,092	7,787,500	8,753,200	9,891,300	11,166,700

* Assumption used: Net Migration to Ontario, 30,000 per Annum
Net Internal Migration, 6,000 per Annum

Labour Force By Sex For Incorporated Centres
1,000 Population And Over, Major Urban Areas, Metropolitan
Areas, Counties, Niagara Region And Ontario, 1961

	Male	Female	Total
A - Burlington			
Brant	21,872	9,446	31,318
Brantford (Major urban area)	15,034	7,219	22,253
Brantford	14,626	7,107	21,733
Paris	1,520	789	2,309
Wentworth	99,368	40,369	139,737
Dundas	3,439	1,408	4,847
Hamilton (Metropolitan area)	109,242	43,465	152,707
Hamilton	76,353	33,278	109,631
Stoney Creek	1,691	567	2,258
Waterdown	506	164	670
B - Niagara			
Haldimand	7,661	2,549	10,210
Caledonia	566	220	786
Dunnville	1,378	701	2,079
Hagersville	553	197	750
Lincoln	33,858	12,773	46,631
Beamsville	654	285	939
Grimsby	1,255	491	1,746
Niagara	622	225	847
St. Catharines (Major urban area)	25,507	9,666	35,173
St. Catharines	22,583	8,798	31,381
Welland	43,354	15,256	58,610
Chippawa	871	317	1,188
Crystal Beach	475	205	680
Fonthill	603	208	811
Fort Erie	2,431	927	3,358
Niagara Falls (Major urban area)	14,596	6,124	20,720
Niagara Falls	6,053	3,002	9,055
Port Colborne	3,770	1,069	4,839
Thorold	2,279	668	2,947
Welland	9,478	3,270	12,748
Total, Niagara Region	206,113	80,393	286,506
Total, Ontario	1,707,392	697,420	2,404,812
Town Of Burlington	12,840	4,046	16,886

Population, Participation Rates and Labour Force Projections*
Niagara Region and Ontario,
Selected Years 1961 and 1981

	Niagara Region						Province of Ontario					
	1961			1981			1961			1981		
Age Groups	Population	Participation Rates %	Labour Force	Population (000's)	Participation Rates %	Labour Force (000's)	Population	Participation Rates %	Labour Force	Population (000's)	Participation Rates %	Labour Force (000's)
Male												
15-24	48,657	60.1	29,222	93.9	54	50.7	413,427	62.9	259,911	812.9	57	459.6
25-44	105,697	96.1	101,621	142.4	95	135.3	880,244	95.9	843,933	1,181.6	96	1,131.1
45-64	72,436	90.8	65,757	108.4	89	96.5	580,612	90.2	523,605	885.3	88	780.0
65+	28,600	29.7	8,498	48.7	24	11.7	231,765	31.5	73,118	390.0	25	96.8
Total	255,390	80.3	205,098	393.4	75	294.2	2,106,048	80.7	1,700,567	3,269.8	75	2,467.5
Female												
15-24	49,502	41.0	20,306	95.6	37	35.4	410,422	42.4	173,876	810.2	39	314.3
25-44	107,585	32.4	34,835	145.0	36	52.2	868,795	35.0	303,706	1,165.4	39	449.8
45-64	71,118	31.3	22,229	106.3	37	39.3	566,770	34.2	193,886	864.6	41	353.6
65+	34,578	6.6	2,279	58.8	7	4.1	276,308	7.6	20,980	465.7	8	36.5
Total	262,783	30.3	79,649	405.7	32	131.0	2,122,295	32.6	692,448	3,305.9	35	1,154.2
Males and Females												
15-24	98,159	50.5	49,528	189.5	45	86.1	823,849	52.7	433,787	1,623.1	48	773.9
25-44	213,282	64.0	136,456	287.4	65	187.5	1,749,039	65.6	1,147,639	2,347.0	67	1,580.9
45-64	143,554	61.3	87,986	214.7	63	135.8	1,147,382	62.5	717,491	1,749.9	65	1,133.6
65+	63,178	17.1	10,777	107.5	15	15.8	508,073	18.5	94,098	855.7	16	133.3
Total	518,173	55.0	284,747	799.1	53	425.2	4,228,343	56.6	2,393,015	6,575.7	55	3,621.7

* Assumption Used: Net Migration to Ontario, 30,000 per Annum
Net Internal Migration, 6,000 per Annum

Estimated Personal Income Distribution,
Niagara Region, 1963

Income Class	A - Burlington		B - Niagara				Province Of
$	Brant	Wentworth	Haldimand	Lincoln	Welland	Region	Ontario
	No. Of Income Recipients						
Under 1,999	8,544	34,128	3,146	12,165	15,548	73,531	611,901
2,000-2,999	6,600	25,505	1,875	8,713	9,731	52,424	426,850
3,000-3,999	5,959	24,007	1,664	7,876	8,090	47,596	421,890
4,000-4,999	5,585	24,321	1,359	9,147	9,418	49,830	376,197
5,000-5,999	3,538	23,182	589	7,346	7,457	42,112	270,621
6,000-9,999	2,657	26,193	549	8,227	7,632	45,258	313,026
10,000 and over	931	5,932	142	1,749	1,322	10,076	92,357
Total	33,814	163,268	9,324	55,223	59,198	320,827	2,512,842

Income Class	A - Burlington		B - Niagara				Province Of
$	Brant	Wentworth	Haldimand	Lincoln	Welland	Region	Ontario
	% Total No. Of Income Recipients						
Under 1,999	25.3	20.9	33.7	22.0	26.3	22.9	24.3
2,000-2,999	19.5	15.6	20.1	15.8	16.4	16.4	17.0
3,000-3,999	17.6	14.7	17.9	14.2	13.7	14.8	16.8
4,000-4,999	16.5	14.9	14.6	16.6	15.9	15.5	15.0
5,000-5,999	10.5	14.2	6.3	13.3	12.6	13.1	10.8
6,000-9,999	7.9	16.1	5.9	14.9	12.9	14.1	12.4
10,000 and over	2.7	3.6	1.5	3.2	2.2	3.2	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Estimated Average Annual Personal Income,
Niagara Region,
1960 To 1963

	1960	1961	1962	1963
		$		
A - Burlington				
Brant	3,391	3,499	3,509	3,739
Wentworth	3,932	4,004	4,223	4,332
B - Niagara				
Haldimand	3,090	3,295	3,312	3,241
Lincoln	3,700	3,807	3,999	4,172
Welland	3,628	3,758	3,847	3,902
Niagara Region	3,756	3,851	4,014	4,131
Province of Ontario	3,711	3,825	3,932	4,052

Estimated Average Annual Personal Income,
By Regions, 1960 To 1963

	1960	1961	1962	1963
		$		
Eastern Ontario	3,572	3,742	3,813	3,936
Lake Ontario	3,279	3,372	3,474	3,594
Central Ontario	3,961	4,106	4,229	4,352
Niagara	3,756	3,851	4,014	4,131
Lake Erie	3,410	3,522	3,548	3,678
Lake St. Clair	3,646	3,676	3,840	4,060
Mid-Western Ontario	3,344	3,380	3,495	3,633
Georgian Bay	2,901	3,031	3,132	3,164
Northeastern Ontario	3,777	3,809	3,868	3,928
Lakehead-Northwestern Ontario	3,662	3,701	3,741	3,787
Province Of Ontario	3,711	3,825	3,932	4,052

REGIONAL LABOUR INCOME OF ONTARIO

	Metro-politan	Niagara	Eastern Ontario	Northeastern Ontario	Lake St. Clair	Lake Erie	Mid-Western Ontario	Lake Ontario	Lakehead-Northwestern Ontario	Georgian Bay	Province
	thousands of dollars										
1951	1,550,470	582,699	359,902	265,642	291,350	188,520	184,236	129,822	129,222	94,260	3,776,123
1952	1,746,193	654,970	400,803	303,046	332,373	215,065	210,177	147,417	148,395	107,532	4,265,971
1953	1,967,236	704,785	455,400	314,443	357,814	238,543	233,121	162,643	151,800	119,271	4,705,056
1954	2,020,536	696,372	482,967	325,722	359,418	247,100	241,484	179,709	157,245	123,550	4,834,103
1955	2,145,781	728,075	513,233	358,070	381,941	262,584	256,617	190,971	167,099	131,292	5,135,663
1956	2,411,889	832,012	563,621	416,006	429,425	295,230	288,520	201,293	187,874	161,035	5,786,905
1957	2,583,629	881,442	656,301	510,814	416,776	302,956	305,835	232,125	230,896	166,378	6,287,152
1958	2,790,953	872,197	694,234	507,276	417,039	334,234	320,409	246,259	232,677	187,701	6,602,979
1959	2,933,034	944,038	728,598	543,953	445,777	362,388	343,346	258,940	236,718	194,228	6,991,020
1960	3,128,889	973,440	792,959	565,419	471,852	389,997	366,461	269,582	250,806	198,784	7,408,189
1961	3,353,260	1,005,324	848,357	564,411	461,820	398,678	382,190	276,287	249,888	211,471	7,751,686
1962	3,498,054	1,080,337	886,754	580,563	495,020	423,113	408,630	295,782	251,392	225,556	8,145,201
1963	3,757,384	1,160,389	942,459	590,423	542,019	459,905	452,734	314,432	257,498	239,973	8,717,216

AVERAGE LABOUR INCOME PER CAPITA OF LABOUR INCOME RECIPIENTS,
NIAGARA REGION, COUNTIES, 1957 TO 1963

	1957	1958	1959	1960	1961	1962	1963
				dollars			
A - Burlington							
Brant	2,580	2,722	2,996	2,922	2,951	3,061	3,367
Wentworth	3,180	3,251	3,474	3,591	3,687	3,904	4,062
Sub-total	3,081	3,158	3,394	3,479	3,566	3,764	3,942
B - Niagara							
Haldimand	2,167	2,447	2,322	2,579	2,612	2,683	2,661
Lincoln	3,013	3,081	3,173	3,285	3,353	3,625	3,800
Welland	3,197	3,188	3,283	3,375	3,562	3,622	3,694
Sub-total	3,054	3,084	3,163	3,278	3,406	3,552	3,664
Total, Niagara Region	3,071	3,130	3,306	3,402	3,504	3,681	3,835

LABOUR INCOME OF THE NIAGARA REGION, COUNTIES, 1957 TO 1963

	1957	1958	1959	1960	1961	1962	1963
				thousands of dollars			
A - Burlington							
Brant	74,730	80,750	88,314	86,078	85,181	90,697	107,377
Wentworth	468,226	456,880	510,225	529,155	541,691	582,443	625,426
Sub-total	542,956	537,630	598,539	615,233	626,872	673,140	732,803
B - Niagara							
Haldimand	16,809	22,092	20,181	21,369	22,035	23,425	23,395
Lincoln	128,511	130,090	138,097	146,273	149,205	182,497	197,920
Welland	193,166	182,385	187,221	190,565	207,212	201,275	206,271
Sub-total	338,486	334,567	345,499	358,207	378,452	407,197	427,586
Total, Niagara Region	881,442	872,197	944,038	973,440	1,005,324	1,080,337	1,160,389

Population 5 Years of Age And Over, Not Attending School By Highest Grade Attended,

Counties, Niagara Region, 1961

	Population 5 Years & Over	Not Attending School										
		Total	No Schooling	Kinder-garten	Elementary		Secondary			University		
					1 - 4	5	1 - 2	3 - 4	5	1 - 2	3 & 4	DEGREE
A - Burlington												
Brant	74,837	54,410	1,930	10	2,012	22,531	12,668	9,672	3,399	838	286	1,064
Wentworth	317,047	235,278	8,266	93	10,626	88,686	54,789	43,777	17,440	3,969	1,475	6,157
Sub-total	391,884	289,688	10,196	103	12,638	111,217	67,457	53,449	20,839	4,807	1,761	7,221
B - Niagara												
Haldimand	24,998	18,123	970	6	631	8,158	4,172	2,550	1,058	221	83	274
Lincoln	112,179	80,423	2,775	21	3,436	30,069	17,599	15,343	6,647	1.713	570	2,250
Welland	145,651	103,167	3,570	42	6,011	40,657	21,701	19,524	6,833	1,827	590	2,412
Sub-total	282,828	201,713	7,315	69	10,078	78,884	43,472	37,417	14,538	3,761	1,243	4,936
Total, Niagara Region	674,712	491,401	17,511	172	22,716	190,101	110,929	90,866	35,377	8,568	3,004	12,157
Total, Ontario	5,495,899	4,030,555	156,340	1,429	205,647	1,480,269	850,477	763,737	331,686	79,097	28,969	132,904

% With Less Than 3 Yrs Secondary School Education Not In School

	No	%	% With 3 or More
Brant	39,151	71.9	28.1
Wentworth	162,460	69.0	31.0
Haldimand	13,937	76.9	23.1
Lincoln	53,900	67.0	33.0
Welland	71,981	69.7	30.3
Niagara	341,429	69.4	30.6
Ontario	2,694,162	66.8	33.2

Average Farm Acreage
1961

Type Of Farm	Acreage				
	Brant	Lincoln	Haldimand	Welland	Wentworth
Dairy	145.2	149.6	167.2	161.3	149.1
Cattle, hogs, sheep [1]	148.9	99.2	148.7	111.0	115.9
Poultry	67.9	50.6	95.6	67.1	74.4
Wheat	188.5	194.0	172.5	103.3	112.2
Small Grains [2]	168.0	122.0	207.2	151.3	141.0
Field Crops [3]	123.7	116.6	115.9	102.7	137.1
Fruits & Vegetables	144.5	37.0	72.5	52.4	47.9
Forestry	341.0	127.0	-	-	200.0
Miscellaneous Specialty	37.6	27.9	43.4	37.7	24.6
Mixed	126.4	105.0	159.8	104.5	110.2
Livestock Combination	122.2	125.4	159.5	118.5	111.4
Field Crops Combination	164.5	153.5	192.2	79.8	91.0
Other Combinations	140.8	75.2	128.3	88.8	112.6
Average Commercial Farm	135.0	63.1	151.5	107.5	102.2

1 Excluding dairy farms.
2 Excluding wheat farms.
3 Other than small grains.

Source: D.B.S. - Census Of Canada - 1961: Agriculture.

Acreage Of Particular Crops As A %
Of Total Field Crop Acreage

Crop	1951		1956		1961		1965		Change Index
	Acres	%	Acres	%	Acres	%	Acres	%	1951 = 100
Hay	229,553	43.5	226,886	45.4	214,476	43.9	204,800	42.6	89
Oats	126,711	24.0	109,525	21.9	137,858	28.2	125,000	26.0	99
Winter Wheat	90,361	17.1	78,038	15.6	60,804	12.5	37,200	7.7	41
Corn for Husking	9,133	1.7	26,098	5.2	18,670	3.8	50,300	10.5	551
Potatoes	3,563	0.7	3,847	0.8	4,747	1.0	5,900	1.2	166
Corn for Fodder	22,688	4.3	24,256	4.9	22,989	4.7	25,800	5.4	114
Mixed Grains	25,921	4.9	15,042	3.0	11,333	2.3	13,300	2.8	51
Rye	6,302	1.2	7,913	1.6	8,804	1.8	6,300	1.3	100
Barley	4,004	0.8	2,546	0.5	3,314	0.7	7,400	1.5	185
Field Roots	1,118	0.2	1,327	0.3	811	0.2	740	0.2	66
Soya Beans	1,085	0.2	1,458	0.3	964	0.2	1,400	0.3	129
Buckwheat	4,347	0.8	1,837	0.4	2,031	0.4	1,490	0.3	34
Spring Wheat	2,711	0.5	742	0.1	1,070	0.2	700	0.1	26
Flax	391	0.1	313	0.1	184	*	160	*	41
Dry Beans	224	*	114	*	36	*	210	*	94
Dry Peas	80	*	136	*	50	*	10	*	13
All Field Crops	528,192	100.0	500,078	100.0	488,141	100.0	480,710	100.0	91

* Less than 0.05
Note: Due to rounding, percentages may not add to 100.0.

Estimated Value Of Marketed,
Principal Commercial Vegetables,
Niagara Region,(1) 1959 To 1965

	1959		1961		1963		1965	
	Value ($)	% Of Ontario (%)	Value ($)	% Of Ontario (%)	Value ($)	% Of Ontario (%)	Value ($)	% Of Ontario (%)
Mushrooms	255,245	8.7	821,070	34.4	937,358	35.4	1,571,280	50.1
Tomatoes (Fresh Market)	693,298	17.3	485,424	11.3	989,220	22.2	840,488	22.6
(Processing)	506,328	5.2	557,957	5.3	437,499	4.2	400,000	2.6
Asparagus	194,876	18.1	205,120	19.0	166,050	16.3	147,660	15.8
Total, Niagara Region	1,649,747	9.2	2,069,571	11.3	2,530,127	13.6	2,959,428	12.6
Total, Ontario	17,849,500		18,286,064		18,536,141		23,424,380	

Estimated Production Of Principal Commercial Vegetables,
Niagara Region, (1) 1951 To 1965

		1951	1953	1955	1957	1959	1961	1963	1965
Mushrooms	lbs.	250,000	290,000	500,000	n.a.	627,500	2,159,000	2,530,500	2,998,000
Tomatoes (Fresh Market)	bu.	571,000	390,000	446,975	457,000	280,075	249,390	341,800	293,900
(Processing)	bu.	743,733	673,400	597,300	349,100	485,100	527,267	440,682	400,686
Asparagus	lbs.	1,254,000	1,284,000	1,220,000	1,050,000	1,118,800	1,123,200	810,000	631,000

(1) Comprises Fruit and Vegetable Districts Covering Counties of Haldimand (Eastern Part), Halton, Lincoln and Wentworth, as outlined By Ontario Department of Agriculture, except for data concerning Tomatoes for Processing.

Source: Ontario Department of Agriculture.

Capital Value Per Acre Of Farms, 1951 And 1961

		1951			1961			
		Total Value ($000's)	Value Per Acre $	Percentage Of Total Value Per Acre %	Total Value ($000's)	Value Per Acre $	Percentage Of Total Value Per Acre %	Change In Index Value Per Acre, 1961 (1951 = 100)
A - Burlington Brant	Land & Buildings	27,981	125	61	63,757	312	76	250
	Machinery & Equipment	7,563	34	17	12,369	60	14	176
	Livestock & Poultry	9,720	44	22	8,135	40	10	91
	Total	45,264	203	100	84,261	412	100	203
Wentworth	Land & Buildings	34,422	148	65	67,417	340	78	230
	Machinery & Equipment	8,846	38	16	11,647	59	13	155
	Livestock & Poultry	9,971	43	19	7,898	40	9	93
	Total	53,239	229	100	86,962	439	100	192
Sub-total	Land & Buildings	62,403	137	63	131,174	326	77	238
	Machinery & Equipment	16,409	36	17	24,016	59	14	164
	Livestock & Poultry	19,691	43	20	16,033	40	9	93
	Total	98,503	216	100	171,223	425	100	197
B - Niagara Haldimand	Land & Buildings	19,588	70	52	37,972	141	65	201
	Machinery & Equipment	7,806	28	21	10,717	40	18	143
	Livestock & Poultry	10,184	37	27	9,771	36	17	97
	Total	37,578	135	100	58,460	217	100	161
Lincoln	Land & Buildings	58,026	325	79	93,613	564	83	174
	Machinery & Equipment	10,704	60	15	13,461	81	12	135
	Livestock & Poultry	4,897	27	6	5,053	31	5	114
	Total	73,627	412	100	112,127	676	100	164
Welland	Land & Buildings	20,941	135	68	34,285	273	76	202
	Machinery & Equipment	5,415	35	18	6,548	52	15	149
	Livestock & Poultry	4,556	29	14	4,004	32	9	110
	Total	30,912	199	100	44,837	357	100	179
Sub-total	Land & Buildings	98,555	161	69	165,870	296	77	184
	Machinery & Equipment	23,925	39	17	30,726	55	14	141
	Livestock & Poultry	19,637	32	14	18,828	33	9	103
	Total	142,117	232	100	215,424	384	100	166
Total, Niagara Region	Land & Buildings	160,958	150	67	297,044	308	77	205
	Machinery & Equipment	40,334	38	17	54,742	57	14	150
	Livestock & Poultry	39,328	37	16	34,861	36	9	97
	Total	240,620	225	100	386,647	401	100	178
Total, Ontario	Land & Buildings	1,419,364	68	56	2,572,303	138	69	203
	Machinery & Equipment	445,278	21	17	579,282	31	15	148
	Livestock & Poultry	683,328	33	27	590,011	32	16	97
	Total	2,547,970	122	100	3,741,596	201	100	165

Farms Classified By Economic Class, Counties, Niagara Region, June 1, 1961

	Total Census Farms	Commercial Farms (1)								Other Farms				
		Dairy	Fruits and Vegetables	Livestock	Poultry	Mixed Farming	Field Crops	Other (2)	Total	Small Scale (3) Part-time	Small Scale (3) Other	Residential And Other (4)	Insti-tutional (5)	Total
A - Burlington														
Brant	1,771	408	54	333	64	77	361	49	1,346	134	99	189	3	425
Wentworth	2,367	446	333	397	143	98	30	118	1,565	264	184	349	5	802
Sub-total	4,138	854	387	730	207	175	391	167	2,911	398	283	538	8	1,227
B - Niagara														
Haldimand	2,070	636	31	494	116	172	8	45	1,502	235	147	186	-	568
Lincoln	3,238	346	1,353	179	125	44	9	72	2,128	427	264	413	6	1,110
Welland	1,494	294	187	162	85	57	3	57	845	225	137	284	3	649
Sub-total	6,802	1,276	1,571	835	326	273	20	174	4,475	887	548	883	9	2,327
Total, Niagara Region	10,940	2,130	1,958	1,565	533	448	411	341	7,386	1,285	831	1,421	17	3,554
Total, Ontario	121,333	26,246	5,027	37,154	3,727	6,930	4,642	6,619	90,345	9,920	9,371	11,604	93	30,988
Niagara As % Of Ontario	9.0	8.1	38.9	4.2	14.3	6.5	8.9	5.2	8.2	13.0	8.9	12.2	18.3	11.5

(1) Generally classified by product type from which 51.0% of total sales was realized.

(2) Includes wheat, small grains, forestry and miscellaneous specialty.

(3) Includes farms with sales of agricultural products of $250 to $1,199
- "part-time" includes those on which operator reported 100 days or more of off-farm work, or income from other sources (excluding investments) greater than the income from sale of agricultural products.
- "other small scale" includes those on which operator reported less than 100 days of off-farm work, and income from sale of agricultural products greater than the income from other sources.

(4) Includes farms with value of agricultural products sold of less than $250.

(5) Includes experimental farms, community pastures, Indian reserves and farms operated by institutions regardless of the amount of sales of agricultural products.

Number & Total Value Of Livestock On Farms
1955 and 1965

		Cattle		Swine		Sheep		Hens & Chickens		Turkeys, etc.		Total	
		No.	Value $	No.	Value $	No.	Value $	No.	Value $	No.	Value $	No.	Value $
A - Burlington Brant	1955	34,240	4,955,500	19,300	683,000	6,300	134,100	300,300	336,100	22,800	63,500	382,940	6,172,200
	1965	37,640	6,287,000	27,500	866,300	3,700	78,100	337,500	328,100	42,279*	216,887*	448,619	7,776,387
Wentworth	1955	34,210	4,976,300	28,100	970,100	3,245	66,000	483,600	467,300	18,700	49,500	567,855	6,529,200
	1965	33,110	5,379,000	31,700	949,500	2,800	54,300	914,600	674,600	52,561*	223,716*	1,034,771	7,281,116
Sub-total	1955	68,450	9,931,800	47,400	1,653,100	9,545	200,100	783,900	803,400	41,500	113,000	950,795	12,701,400
	1965	70,750	11,666,000	59,200	1,815,800	6,500	132,400	1,252,100	1,002,700	94,840*	440,603*	1,483,390	15,057,503
B - Niagara Haldimand	1955	41,290	6,115,400	19,200	659,500	5,290	109,600	429,700	441,200	39,400	101,400	534,880	7,427,100
	1965	53,160	8,607,900	28,800	952,900	5,400	111,100	420,600	359,700	96,761*	374,103*	604,721	10,405,703
Lincoln	1955	18,570	2,370,000	12,300	381,600	2,240	49,800	308,100	274,400	16,300	37,600	357,510	3,113,400
	1965	21,960	3,465,000	16,400	487,700	1,700	33,300	1,111,900	809,500	33,176*	148,560*	1,185,136	4,944,060
Welland	1955	17,190	2,432,600	8,100	313,900	1,840	37,900	195,000	196,300	18,200	42,300	240,330	3,023,000
	1965	19,100	3,096,100	13,600	413,500	1,700	32,800	477,200	386,400	16,188*	83,331*	527,788	4,012,131
Sub-total	1955	77,050	10,918,000	39,600	1,355,000	9,370	197,300	932,800	911,900	73,900	181,300	1,132,720	13,563,500
	1965	94,220	15,169,000	58,800	1,854,100	8,800	177,200	2,009,700	1,555,600	146,125*	605,994*	2,317,645	19,361,894
Total, Niagara Region	1955	145,500	20,849,800	87,000	3,008,100	18,915	397,400	1,716,700	1,715,300	115,400	294,300	2,083,515	26,264,900
	1965	164,970	26,835,000	118,000	3,669,900	15,300	309,600	3,261,800	2,558,300	240,965*	1,046,597*	3,801,035	34,419,397
Total, Ontario	1955	3,066,000	373,638,000	1,840,000	57,954,000	413,000	8,477,000	20,860,000	21,865,000	1,000,000	2,481,000	27,179,000	464,415,000
	1965	3,344,000	506,549,000	1,940,000	59,840,000	302,000	5,718,000	23,665,000	23,294,000	2,937,113*	12,569,618*	32,188,113	607,970,618
Niagara as % of Ontario	1955	4.7	5.6	4.7	5.2	4.6	4.7	8.2	7.8	11.5	11.9	7.7	5.7
	1965	4.9	5.3	6.1	6.1	5.1	5.4	13.8	11.0	8.2	8.3	11.8	5.7

* 1961 figures - latest ones available.

Farm Cash Receipts
1961

	Field Crops*		Livestock		Fruits & Vegetables		Poultry & Eggs		Dairy Products		Others		Total Value
	$	%[1]	$	%[1]	$	%[1]	$	%[1]	$	%[1]	$	%[1]	$
Brant	10,833,550	49.5	5,163,160	23.6	1,016,160	4.6	1,830,440	8.4	2,973,860	13.6	85,050	.4	21,902,220
Haldimand	607,250	5.9	3,528,730	34.2	240,910	2.3	1,799,960	17.4	4,053,840	39.3	91,990	.9	10,322,680
Lincoln	204,570	1.1	1,630,910	8.9	11,357,820	61.8	2,578,490	14.0	2,525,530	13.7	77,630	.4	18,374,950
Welland	274,610	4.0	1,098,210	16.0	1,809,760	26.3	1,687,240	24.5	1,859,310	27.1	143,750	2.1	6,872,880
Wentworth	1,107,360	7.2	3,490,720	22.8	4,095,880	26.8	2,612,760	17.1	3,694,540	24.1	301,230	2.0	15,302,490
Niagara Region	13,027,340	17.9	14,911,730	20.5	18,520,530	25.4	10,508,890	14.4	15,107,080	20.8	699,650	1.0	72,775,220
Total, Ontario	160,382,680	21.1	272,353,930	35.8	72,095,760	9.5	89,133,960	11.7	156,768,650	20.6	10,933,410	1.4	761,668,390

* Includes tobacco.
1 Percent Of Total Value.
Note: Due to rounding, may not add to 100.0.

Source: D.B.S. - Census Of Canada, 1961: Agriculture.

Value Of Mineral Production By Principal Groups,
Counties, Niagara Region, 1964

	Metallics ($000's)	Non-Metallics ($000's)	Fuels ($000's)	Structural Materials ($000's)	Total Value ($000's)	% of Region %
A - Burlington						
Brant	-	-	*	3,814	3,814	15.1
Wentworth	-	-	*	4,480	4,480	17.7
Sub-total	-	-	*	8,294	8,294	32.8
B - Niagara						
Haldimand	-	1,377	607**	1,928	3,912	15.5
Lincoln	-	-	*	2,345	2,345	9.3
Welland	-	568	77	10,101	10,746	42.5
Sub-total	-	1,945	684	14,374	17,003	67.2
Total, Niagara Region	-	1,945	684	22,668	25,297	100.0

* Included with Haldimand County
** Includes Brant, Lincoln and Wentworth Counties.

Mineral Production And Value,
Niagara Region, 1961 And 1964

		1961			1964		
		Niagara Region	Ontario	Per Cent of Ontario	Niagara Region	Ontario	Per Cent of Ontario
Non-Metallics	($000's)	1,279	23,630	5.4	1,945	21,473	9.1
Gypsum	'000 tons	425	425	100.0	517	517	100.0
	($000's)	992	992	100.0	1,377	1,377	100.0
Peat	'000 tons	15	15	100.0	26	27	96.3
	($000's)	251	251	100.0	566	574	98.6
Quartz	'000 tons	12	1,540	0.8	2	1,127	0.2
	($000's)	36	827	4.4	3	837	0.4
Fuels	($000's)	606	9,161	6.6	683	9,774	7.0
Natural Gas	'000 M cu. ft.	1,570	14,544	10.8	1,639	13,816	11.9
	($000's)	606	5,614	10.8	683	5,760	11.9
Structural Materials	($000's)	17,065	130,093	13.1	22,668	169,063	13.4
Clay Products	*	*	*	*	*	*	*
	($000's)	2,579	19,037	13.5	2,209	23,724	9.3
Cement	'000 tons	84	2,227	3.8	126	3,044	4.1
	($000's)	1,434	35,672	4.0	2,024	46,804	4.3
Lime	'000 tons	139	865	16.1	200	1,050	19.0
	($000's)	1,713	11,548	14.8	2,561	13,128	19.5
Sand and Gravel	'000 tons	4,582	70,208	6.5	8,402	76,917	10.9
	($000's)	3,022	40,344	7.5	5,347	54,589	9.8
Stone:							
Limestone	'000 tons	7,091	16,655	42.6	9,131	22,217	41.1
	($000's)	8,317	19,242	43.2	10,526	25,243	41.7
Total Value of Mineral Production	($000's)	18,950	943,669	2.0	25,297	901,583	2.8

* No common measure
Note: Due to rounding, figures may not add to totals.

Value of Shipments of Goods of Own Manufacture by Industry Groups, Niagara Region, 1962

Industry Group	Value Of Shipments of Goods of Own Manufacture ($000's)	%
Food and Beverage Industries	214,173	9.2
Leather Industries	5,255	0.2
Textile Industries	66,093	2.8
Knitting Mills	17,842	0.8
Clothing Industries	9,071	0.4
Wood Industries	7,384	0.3
Furniture & Fixture Industries	5,475	0.2
Paper & Allied Industries	138,981	6.0
Printing, Publishing & Allied Industries	27,256	1.2
Primary Metal Industries	774,656	33.2
Metal Fabricating Industries	223,396	9.6
Machinery Industries	136,075	5.8
Transportation Equipment	201,138	8.6
Electrical Products Industries	129,610	5.6
Non-Metallic Mineral Products Industries	94,086	4.0
Chemical & Chemical Products Industries	178,544	7.7
Miscellaneous Manufacturing Industries	33,587	1.4
All Other Major Groups	70,694	3.0
Total, Niagara Region	2,333,316	100.0

Principal Statistics Of Manufacturing, Niagara Region, 1962.

Industry Group and Industry	Establishments No.	Total Employees No.	Total Salaries & Wages ($000's)	Cost Of Fuel & Electricity ($000's)	Cost Of Materials & Supplies Used ($000's)	Value Added ($000's)	Value Of Shipments Of Goods Of Own Manufacture ($000's)
Food & Beverage Industries							
Slaughtering & meat packing	16	964	3,609	264	28,224	5,463	33,880
Sausage & sausage casing	6	43	131	14	1,014	498	1,522
Poultry processors	5	83	223	25	2,118	506	2,641
Dairy factories	42	1,598	6,750	680	19,522	10,580	30,732
Fruit & vegetable prep.	38	2,929	8,027	669	31,770	17,649	50,643
Feed mills	29	206	728	157	4,743	1,269	6,126
Bakeries	116	1,349	4,598	379	5,808	6,998	13,184
Soft drink manufacturers	15	469	1,888	157	1,897	3,821	5,877
Wineries	7	337	1,657	124	5,528	6,030	10,548
Misc. food manufacturers	10	127	413	32	1,089	884	1,978
All other food & beverage inds.	26	1,459	5,727	612	39,423	17,107	57,042
Total	310	9,564	33,751	3,113	141,136	70,805	214,173
Leather Industries							
Shoe factories	5	462	1,273	27	2,015	1,599	3,716
Leather products misc.	5	129	390	5	602	525	1,126
All other leather manufacturers	4	46	135	7	149	249	413
Total	14	637	1,798	39	2,766	2,373	5,255
Textile Industries							
Cotton yarn & cloth	6	2,097	6,711	445	14,166	11,507	25,118
Cordage & twine industry	4	666	2,808	119	8,995	4,040	13,167
Canvas products	7	93	310	9	415	468	903
Embroidery, pleating, hemstitching	5	8	13	1	7	45	53
All other textile manufacturers	26	1,932	6,750	375	14,371	12,459	26,852
Total	48	4,796	16,592	949	37,954	28,519	66,093
Knitting Mills							
Hosiery mills	4	528	1,497	49	2,101	2,842	5,196
Other knitting mills	10	1,598	4,166	156	6,826	5,833	12,646
Total	14	2,126	5,663	205	8,927	8,675	17,842
Clothing Industries							
Men's clothing factories	6	963	2,842	32	3,783	3,974	7,631
Children's clothing industry	4	66	124	2	206	208	389
Fur goods industry	4	17	72	4	123	163	287
All other clothing manufacturers	10	141	348	5	289	468	764
Total	24	1,187	3,386	43	4,401	4,813	9,071

Principal Statistics Of Manufacturing, Niagara Region, 1962 (Cont'd)

Industry Group and Industry	Establishments No.	Total Employees No.	Total Salaries & Wages ($000's)	Cost Of Fuel & Electricity ($000's)	Cost Of Materials & Supplies Used ($000's)	Value Added ($000's)	Value Of Shipments Of Goods Of Own Manufacture ($000's)
Wood Industries							
Sawmills	11	36	100	16	92	130	237
Sash, door & planing mills	31	260	1,017	46	2,045	1,752	3,837
Wooden boxes	10	234	686	33	916	1,040	1,965
Misc. wood industries	3	30	113	25	178	179	382
All other wood manufacturers	3	119	374	12	402	534	963
Total	58	679	2,290	132	3,633	3,635	7,384
Furniture & Fixture Industries							
Household furniture	72	213	877	39	1,231	1,562	2,805
All other furniture manufacturers	13	292	1,328	36	1,205	1,470	2,670
Total	85	505	2,205	75	2,436	3,032	5,475
Paper & Allied Industries							
Pulp & Paper mills	9	3,597	20,301	5,197	42,006	37,581	84,703
Folding box & set-up box manufacturers	16	735	3,171	88	6,301	5,669	11,981
Other paper converters	9	1,156	5,004	254	13,755	11,730	25,810
All other paper manufacturers	4	700	3,451	213	9,150	7,124	16,487
Total	38	6,188	31,927	5,752	71,212	62,104	138,981
Printing & Publishing & Allied Industries							
Commercial printing	103	984	4,319	100	4,073	7,072	11,130
Engraving & duplicating plates	9	171	1,018	27	317	1,353	1,698
Printing & publishing	25	1,089	5,343	108	3,129	10,757	13,993
All other printing & publishing Industries	5	73	236	2	88	347	435
Total	142	2,317	10,916	237	7,607	19,529	27,256
Primary Metal Industries							
Iron foundries	15	1,128	5,421	382	10,212	7,944	18,054
Copper & alloy rolling casting	7	175	686	58	1,193	1,131	2,372
Metal rolling, casting & extruding	9	354	1,773	207	4,890	3,367	8,273
All other primary metal industries	15	23,731	137,418	23,447	413,776	316,969	745,957
Total	46	25,388	145,298	24,094	430,071	329,411	774,656

Principal Statistics Of Manufacturing, Niagara Region, 1962 (Cont'd)

Industry Group and Industry	Establishments No.	Total Employees No.	Total Salaries & Wages ($000's)	Cost Of Fuel & Electricity ($000's)	Cost Of Materials & Supplies Used ($000's)	Value Added ($000's)	Value Of Shipments Of Goods Of Own Manufacture ($000's)
Metal Fabricating Industries							
Boiler and plate works	7	719	3,942	95	2,837	5,574	8,668
Fabricated structural metal industries	7	1,439	7,720	235	13,726	9,150	23,111
Ornamental & architectural metal	34	586	2,521	84	2,938	3,896	6,934
Metal stamping, pressing & coating	51	2,437	12,422	634	32,914	19,111	52,300
Wire & wire products	27	3,592	19,099	983	45,917	28,886	75,364
Hardware, tool & cutlery	33	1,156	5,392	256	5,222	9,508	14,725
Heating equipment	8	899	3,865	142	6,895	8,067	14,836
Machine shops	49	375	1,693	80	966	2,458	3,470
Misc. metal fabricating	32	1,116	5,566	488	13,762	10,465	23,989
Total	248	12,319	62,220	2,995	125,178	97,117	223,396
Machinery Industries							
Agricultural implement industries	7	4,466	23,011	954	34,235	32,915	66,761
Misc. machinery & equipment	34	3,846	21,348	521	20,359	38,887	60,269
All other machinery manufacturers	7	546	2,472	98	4,845	4,085	9,045
Total	48	8,858	46,831	1,573	59,439	75,887	136,075
Transportation Equipment							
All other transportation equipment	27	9,530	53,120	2,685	104,076	95,987	201,138
Total	27	9,530	53,120	2,685	104,076	95,987	201,138
Electrical Products Industries							
Manufacturers of small electrical appliances	8	766	3,475	86	5,587	6,295	11,991
All other electrical products manufacturers	24	7,395	37,295	960	46,324	72,103	117,619
Total	32	8,161	40,770	1,046	51,911	78,398	129,610
Non-Metallic Mineral Products Industries							
Concrete products manufacturers	29	507	2,164	298	3,429	4,053	7,695
Ready-mix concrete manufacturers	9	153	714	111	2,981	1,775	4,867
Clay products manufacturers (Domestic)	7	209	785	324	168	1,538	2,017
Clay products manufacturers (Imported)	5	487	2,194	240	2,845	3,939	6,778
Abrasives manufacturers	9	1,914	10,405	3,235	13,879	16,209	32,232
All other non-metallic mineral products	22	2,126	9,662	2,423	15,526	22,587	40,497
Total	81	5,396	25,924	6,631	38,828	50,101	94,086

Principal Statistics Of Manufacturing, Niagara Region, 1962 (Cont'd)

Industry Group and Industry	Establishments No.	Total Employees No.	Total Salaries & Wages ($000's)	Cost Of Fuel & Electricity ($000's)	Cost Of Materials & Supplies Used ($000's)	Value Added ($000's)	Value Of Shipments Of Goods Of Own Manufacture ($000's)
Chemical & Chemical Products Industries							
Paint & varnish manufacturers	12	318	1,453	50	3,547	3,018	6,567
Manufacturers of toilet preparations	4	62	205	6	432	468	886
Manufacturers of industrial chemicals	11	2,027	11,384	7,268	25,771	29,230	62,459
Other chemical industries	30	966	5,195	473	13,509	14,015	27,810
All other chemical manufacturers	20	1,502	9,160	1,150	43,461	37,316	80,822
Total	77	4,875	27,397	8,947	86,720	84,047	178,544
Miscellaneous Manufacturing Industries							
Ophthalmic goods manufacturers	5	50	141	3	130	242	374
Dental laboratories	16	50	188	6	123	381	510
Jewellery & silverware manufacturers	7	473	2,093	91	3,182	3,575	6,791
Broom brush & mop industries	5	169	693	21	1,551	1,233	2,843
Plastic fabricators	8	166	527	22	1,029	859	1,891
Model & pattern manufacturers	10	24	123	3	47	249	309
Signs & display industries	20	158	616	26	790	941	1,762
Stamp & stencil manufacturers	6	93	451	10	236	607	851
Artificial ice manufacturers	5	21	68	18	14	105	138
Other miscellaneous industries	6	425	1,824	58	1,914	3,039	5,026
All other misc. manufacturing manufacturers	26	1,283	4,335	93	5,340	7,772	13,092
Total	114	2,912	11,059	351	14,356	19,003	33,587
All Other Major Groups	12	2,539	13,354	724	34,643	37,706	70,694
Total, Niagara Region	1,418	107,977	534,501	59,591	1,225,294	1,071,142	2,333,316

Note: Totals may not add due to rounding.

Manufacturing in Selected Centres

	Industry Group	Establishments No.	Value Of Shipments Of Goods Of Own Manufacture ($000's)	Value Added-Manufacturing Activity ($000's)	Employees Total Number	Employees Salaries & Wages ($000's)	Establishments No.	Value Of Shipments Of Goods Of Own Manufacture ($000's)	Value Added-Manufacturing Activity ($000's)	Employees Total Number	Employees Salaries & Wages ($000's)
		NIAGARA REGION					BRANTFORD				
1	Food & Beverage	310	214,173	70,805	9,564	33,751	24 (7.7)	17,680 (8.3)	5,657 (8.0)	1,073 (11.2)	3,552 (10.5)
2	Textile	48	66,093	28,519	4,796	16,592	10 (20.8)	12,542 (19.0)	4,808 (16.9)	901 (18.8)	3,366 (20.3)
3	Clothing	24	9,071	4,813	1,187	3,386	-	-	-	-	-
4	Wood	58	7,384	3,635	679	2,290	-	-	-	-	-
5	Furniture & Fixture	85	5,475	3,032	505	2,205	15 (17.6)	1,493 (27.3)	806 (26.6)	99 (19.6)	475 (21.5)
6	Paper & Allied	38	138,981	62,104	6,188	31,927	8 (21.1)	9,037 (6.5)	4,956 (8.0)	552 (8.9)	2,381 (7.5)
7	Printing & Publishing & Allied	142	27,256	19,529	2,317	10,916	15 (10.6)	2,693 (9.9)	2,064 (10.6)	264 (11.4)	1,369 (12.5)
8	Primary Metal	46	774,656	329,411	25,388	145,298	7 (15.2)	5,835 (0.8)	2,871 (0.9)	468 (1.8)	2,279 (1.6)
9	Metal Fabricating	248	223,396	97,117	12,319	62,220	22 (8.9)	8,601 (3.9)	4,669 (4.8)	476 (3.9)	2,259 (3.6)
10	Machinery	48	136,075	75,887	8,858	46,831	11 (22.9)	41,285 (30.3)	15,287 (20.1)	2,410 (27.2)	11,616 (24.8)
11	Electrical Products	32	129,610	78,398	8,161	40,770	5 (15.6)	10,618 (8.2)	4,626 (5.9)	614 (7.5)	2,342 (5.7)
12	Non-Metallic Mineral Products	81	94,086	50,101	5,396	25,924	7 (8.6)	3,993 (4.2)	2,472 (4.9)	323 (6.0)	1,455 (5.6)
13	Chemical & Chemical Products	77	178,544	84,047	4,875	27,397	9 (11.7)	14,858 (8.3)	8,529 (10.1)	702 (14.4)	3,553 (13.0)
14	Miscellaneous Manufacturing	114	33,587	19,003	2,912	11,059	16 (14.0)	8,318 (24.8)	5,021 (26.4)	812 (27.9)	2,854 (25.8)
15	Other Major Groups	67	294,929	144,741	14,832	73,935	13	16,275	8,956	1,306	4,762
	Totals	1,418	2,333,316	1,071,142	107,977	534,501	162 (11.4)	153,228 (6.6)	70,722 (6.6)	10,000 (9.3)	42,263 (7.9)

	Industry Group	Establishments No.	Value Of Shipments Of Goods Of Own Manufacture ($000's)	Value Added-Manufacturing Activity ($000's)	Employees Total Number	Employees Salaries & Wages ($000's)	Establishments No.	Value Of Shipments Of Goods Of Own Manufacture ($000's)	Value Added-Manufacturing Activity ($000's)	Employees Total Number	Employees Salaries & Wages ($000's)
		HAMILTON					ST. CATHARINES				
1	Food & Beverage	96 (31.0)	76,637 (35.8)	25,451 (35.9)	3,915 (40.9)	14,402 (42.7)	30 (9.7)	13,484 (6.3)	4,903 (6.9)	824 (8.6)	2,416 (7.2)
2	Textile	19 (39.6)	20,871 (31.6)	9,062 (31.8)	1,525 (31.8)	5,078 (30.6)	7 (14.6)	3,577 (5.4)	1,641 (5.8)	222 (4.6)	764 (4.6)
3	Clothing	15 (62.5)	5,543 (61.1)	3,123 (64.9)	769 (64.8)	2,270 (67.0)	-	-	-	-	-
4	Wood	14 (24.1)	2,171 (29.4)	1,099 (30.2)	214 (31.5)	721 (31.5)	11 (19.0)	1,245 (16.9)	683 (18.8)	90 (13.3)	378 (16.5)
5	Furniture & Fixture	30 (35.3)	798 (14.6)	449 (14.8)	53 (10.5)	189 (8.6)	10 (11.8)	230 (4.2)	145 (4.8)	20 (4.0)	62 (2.8)
6	Paper & Allied	14 (36.8)	35,431 (25.5)	15,526 (25.0)	1,729 (27.9)	8,031 (25.2)	-	-	-	-	-
7	Printing & Publishing & Allied	67 (47.2)	15,596 (57.2)	11,060 (56.6)	1,176 (50.8)	5,812 (53.2)	-	-	-	-	-
8	Primary Metal	-	-	-	-	-	4 (8.7)	1,830 (0.2)	1,039 (0.3)	168 (0.7)	697 (0.5)
9	Metal Fabricating	95 (38.3)	130,052 (58.2)	49,627 (51.1)	6,474 (52.6)	33,795 (54.3)	41 (16.5)	33,788 (15.1)	18,655 (19.2)	2,439 (19.8)	12,070 (19.4)
10	Machinery	18 (37.5)	68,175 (50.1)	45,139 (59.5)	4,913 (55.5)	27,210 (58.1)	-	-	-	-	-
11	Electrical Products	15 (46.9)	103,448 (79.8)	65,424 (83.5)	6,405 (78.5)	33,331 (81.8)	-	-	-	-	-
12	Non-Metallic Mineral Products	25 (30.9)	29,586 (31.4)	17,449 (34.8)	2,051 (38.0)	9,081 (35.0)	7 (8.6)	2,192 (2.3)	1,022 (2.0)	161 (3.0)	685 (2.6)
13	Chemical & Chemical Products	32 (41.6)	93,076 (52.1)	44,929 (53.5)	1,873 (38.4)	11,355 (41.4)	5 (6.5)	1,442 (0.8)	856 (1.0)	55 (1.1)	333 (1.2)
14	Miscellaneous Manufacturing	50 (43.9)	8,608 (25.6)	4,931 (25.9)	786 (27.0)	3,043 (27.5)	-	-	-	-	-
15	Other Major Groups	33	584,565	298,368	21,699	122,242	37	163,454	81,821	8,061	44,646
	Totals	523 (36.9)	1,174,557 (50.3)	591,637 (55.2)	53,582 (49.6)	276,560 (51.7)	152 (10.7)	221,242 (9.5)	110,765 (10.3)	12,040 (11.1)	62,051 (11.6)

	Industry Group	Establishments No.	Value Of Shipments Of Goods Of Own Manufacture ($000's)	Value Added-Manufacturing Activity ($000's)	Employees Total Number	Employees Salaries & Wages ($000's)	Establishments No.	Value Of Shipments Of Goods Of Own Manufacture ($000's)	Value Added-Manufacturing Activity ($000's)	Employees Total Number	Employees Salaries & Wages ($000's)
		NIAGARA FALLS					WELLAND				
1	Food & Beverage	24 (7.7)	26,606 (12.4)	13,069 (18.5)	1,149 (12.0)	4,849 (14.4)	11 (3.5)	2,767 (1.3)	1,272 (1.8)	229 (2.4)	910 (2.7)
4	Wood	-	-	-	-	-	4 (6.9)	151 (2.0)	63 (1.7)	21 (3.1)	70 (3.1)
5	Furniture & Fixture	4 (4.7)	228 (4.2)	140 (4.6)	16 (3.2)	54 (2.4)	-	-	-	-	-
7	Printing & Publishing & Allied	8 (5.6)	1,940 (7.1)	1,358 (7.0)	182 (7.9)	815 (7.5)	-	-	-	-	-
8	Primary Metal	4 (8.7)	1,625 (0.2)	586 (0.2)	147 (0.6)	707 (0.5)	7 (15.2)	113,247 (14.6)	52,188 (15.8)	4,922 (19.4)	29,369 (20.2)
9	Metal Fabricating	15 (6.0)	14,923 (6.7)	6,912 (7.1)	736 (6.0)	3,534 (5.7)	9 (3.6)	4,431 (2.0)	2,431 (2.5)	308 (2.5)	1,540 (2.5)
14	Miscellaneous Manufacturing	12 (10.5)	7,978 (23.8)	4,010 (21.1)	492 (16.9)	2,241 (20.3)	6 (5.3)	419 (1.2)	177 (0.9)	18 (0.6)	74 (0.7)
15	Other Major Groups	28	81,790	37,675	3,396	17,931	21	28,902	14,086	1,979	8,104
	Totals	95 (6.7)	135,090 (5.8)	63,750 (6.0)	6,118 (5.7)	30,131 (5.6)	58 (4.1)	149,917 (6.4)	70,217 (6.6)	7,477 (6.9)	40,067 (7.5)

Manufacturing Activity Of Selected Cities, Niagara Region, 1962

	Establishments No.	% Of Region %	Value Of Shipments Of Goods Of Own Manufacture ($000's)	% Of Region %	Value Added-Manufacturing Activity ($000's)	% Of Region %	Total Employees No.	% Of Region %	Total Salaries And Wages ($000's)	% Of Region %
A - Burlington										
Brant										
Brantford	162	11.4	153,228	6.6	70,722	6.6	10,000	9.3	42,263	7.9
Wentworth										
Hamilton	523	36.9	1,174,557	50.3	591,637	55.2	53,582	49.6	276,560	51.7
B - Niagara										
Lincoln										
St. Catharines	152	10.7	221,242	9.5	110,765	10.3	12,040	11.1	62,051	11.6
Welland										
Niagara Falls	95	6.7	135,090	5.8	63,750	6.0	6,118	5.7	30,131	5.6
Welland	58	4.1	149,917	6.4	70,217	6.6	7,477	6.9	40,067	7.5
Niagara Region	1,418	69.8	2,333,316	78.6	1,071,142	84.7	107,977	82.6	534,501	84.3

Value Added Per Employee, Selected Cities, Niagara Region, 1962

Industry Group	Niagara Region $	Brantford $	Hamilton $	St. Catharines $	Niagara Falls $	Welland $
Food & Beverage	7,403	5,272	6,501	5,950	11,374	5,555
Textile	5,946	5,336	5,943	7,392	-	-
Clothing	4,055	-	4,061	-	-	-
Wood	5,353	-	5,136	7,600	-	3,000
Furniture & Fixture	6,004	8,141	8,472	7,250	8,750	-
Paper & Allied	10,036	8,978	8,980	-	-	-
Printing & Publishing & Allied	8,429	7,818	9,405	-	7,462	-
Primary Metal	12,975	6,135	-	6,185	3,986	10,603
Metal Fabricating	7,884	9,809	7,666	7,649	9,391	7,893
Machinery	8,567	6,343	9,188	-	-	-
Electrical Products	9,606	7,536	10,215	-	-	-
Non-Metallic Mineral Products	9,285	7,653	8,508	6,348	-	-
Chemical & Chemical Products	17,240	12,150	23,988	15,564	-	-
Miscellaneous Manufacturing	6,526	6,183	6,274	-	8,150	9,833
Other Major Groups	9,759	6,858	13,750	10,152	11,094	7,118
Totals	9,920	7,072	11,042	9,200	10,420	9,391

Salaries And Wages Per Employee, Selected Cities, Niagara Region, 1962

Industry Group	Niagara Region $	Brantford $	Hamilton $	St. Catharines $	Niagara Falls $	Welland $
Food & Beverage	3,529	3,310	3,679	2,932	4,220	3,974
Textile	3,460	3,736	3,330	3,441	-	-
Clothing	2,853	-	2,952	-	-	-
Wood	3,373	-	3,369	4,200	-	3,333
Furniture & Fixture	4,366	4,798	3,566	3,100	3,375	-
Paper & Allied	5,160	4,313	4,645	-	-	-
Printing & Publishing & Allied	4,711	5,186	4,942	-	4,478	-
Primary Metal	5,723	4,870	-	4,149	4,810	5,967
Metal Fabricating	5,051	4,746	5,220	4,949	4,802	5,000
Machinery	5,287	4,820	5,538	-	-	-
Electrical Products	4,996	3,816	5,204	-	-	-
Non-Metallic Mineral Products	4,804	4,505	4,428	4,255	-	-
Chemical & Chemical Products	5,620	5,061	6,062	6,055	-	-
Miscellaneous Manufacturing	3,798	3,515	3,872	-	4,555	4,111
Other Major Groups	4,985	3,646	5,634	5,539	5,280	4,095
Totals	4,950	4,226	5,161	5,154	4,925	5,359

Cargo Handled At Selected Ports,
Niagara Region, 1954, 1958 To 1964

		Coastwise Shipping			Foreign Shipping			Total Cargo Handled
		Loaded	Unloaded	Total	Loaded	Unloaded	Total	
		(Cargo Tons)						
Hamilton								
	1954	242,363	556,574	798,937	34,753	4,488,534	4,523,287	5,322,224
	1958	277,794	582,586	860,380	11,924	5,321,772	5,333,696	6,194,076
	1959	379,537	1,647,725	2,027,262	65,297	5,393,479	5,458,776	7,486,038
	1960	334,107	583,285	917,392	229,355	7,003,276	7,232,631	8,150,023
	1961	387,577	1,191,040	1,578,617	107,928	6,101,350	6,209,278	7,787,895
	1962	329,879	705,441	1,035,320	234,779	6,958,713	7,193,492	8,228,812
	1963	380,298	681,265	1,061,563	208,420	7,665,320	7,873,740	8,935,303
	1964	498,197	917,558	1,415,755	201,273	7,775,530	7,976,803	9,392,558
% Change	1964/1954	105.6	64.9	77.2	479.2	73.2	76.3	76.5
	1964/1963	31.0	34.7	33.4	-3.4	1.4	1.3	5.1
Port Colborne								
	1954	1,484,538	1,709,863	3,194,401	17,764	542,730	560,494	3,754,895
	1958	1,599,370	1,959,187	3,558,557	381,449	440,082	821,531	4,380,088
	1959	806,190	1,409,626	2,215,816	717,281	402,321	1,119,602	3,335,418
	1960	373,797	816,351	1,190,148	1,118,229	295,505	1,413,734	2,603,882
	1961	673,230	999,908	1,673,138	979,581	311,910	1,291,491	2,964,629
	1962	405,972	852,036	1,258,008	1,285,743	313,585	1,599,328	2,857,336
	1963	444,152	956,632	1,400,784	1,104,306	347,375	1,451,681	2,852,465
	1964	577,848	1,173,348	1,751,196	1,356,108	455,849	1,811,957	3,563,153
% Change	1964/1954	-61.1	-31.4	-45.2	7,534.0	-16.0	223.3	-5.1
	1964/1963	30.1	22.7	25.0	22.8	31.2	24.8	24.9
Thorold								
	1954	18,252	485,652	503,904	163,319	308,515	471,834	975,738
	1958	22,177	401,925	424,102	177,958	375,388	553,346	977,448
	1959	20,364	362,449	382,813	179,594	397,460	577,054	959,867
	1960	19,391	366,025	385,416	186,591	313,514	500,105	885,521
	1961	20,871	291,553	312,424	199,867	198,819	398,686	711,110
	1962	30,172	357,857	388,029	183,894	217,340	401,234	789,263
	1963	31,125	384,977	416,102	162,338	252,597	414,935	831,037
	1964	38,067	371,836	409,903	143,742	270,760	414,502	824,405
% Change	1964/1954	108.6	-23.4	-18.7	-12.0	-12.2	-12.2	-15.5
	1964/1963	22.3	-3.4	-1.5	-11.5	7.2	-0.1	-0.8
St. Catharines								
	1954	-	72,190	72,190	-	123,742	123,742	195,932
	1958	4,345	207,303	211,648	-	157,823	157,823	369,471
	1959	8,189	276,731	284,920	-	165,744	165,744	450,664
	1960	47	270,284	270,331	787	101,953	102,740	373,071
	1961	1,562	281,438	283,000	13,760	111,388	125,148	408,148
	1962	22,260	233,714	255,974	2,009	58,235	60,244	316,218
	1963	-	221,247	221,247	2,098	90,019	92,117	313,364
	1964	-	284,992	284,992	8,150	92,665	100,815	385,807
% Change	1964/1954	-	294.8	294.8	-	-25.1	-18.5	96.9
	1964/1963	-	28.8	28.8	288.5	2.9	9.4	23.1

Cargo Handled At Selected Ports,
Niagara Region, 1954, 1958 To 1964

		Coastwise Shipping			Foreign Shipping			Total Cargo Handled
		Loaded	Unloaded	Total	Loaded	Unloaded	Total	
		(Cargo Tons)						
Niagara Bar								
	1954	-	-	-	-	-	-	-
	1958	-	-	-	-	-	-	-
	1959	462,923	-	462,923	-	-	-	462,923
	1960	341,650	-	341,650	6,950	-	6,950	348,600
	1961	362,136	-	362,136	-	-	-	362,136
	1962	284,575	-	284,575	-	-	-	284,575
	1963	262,110	-	262,110	-	-	-	262,110
	1964	382,678	-	382,678	42,490	-	42,490	425,168
% Change	1964/1954	-	-	-	-	-	-	-
	1964/1963	46.0	-	46.0	-	-	-	62.2
Welland								
	1954	6,446	183,072	189,518	13,537	35,942	49,479	238,997
	1958	3,701	112,530	116,231	13,561	21,874	35,435	151,666
	1959	4,812	128,402	133,214	14,829	25,618	40,447	173,661
	1960	3,007	101,693	104,700	8,716	13,730	22,446	127,146
	1961	3,536	89,810	93,346	4,794	24,743	29,537	122,883
	1962	3,560	81,138	84,698	17,948	15,247	33,195	117,893
	1963	5,776	73,222	78,998	1,774	18,839	20,613	99,611
	1964	1,952	107,642	109,594	7,256	9,921	17,177	126,771
% Change	1964/1954	-69.7	-41.2	-42.2	-46.4	-72.4	-65.3	-47.0
	1964/1963	-66.2	47.0	38.7	309.0	-47.3	-16.7	27.3
Niagara Falls								
	1954	-	-	-	-	-	-	-
	1958	211,360	45,450	256,810	75,500	-	75,500	332,310
	1959	2,000	74,150	76,150	43,400	-	43,400	119,550
	1960	-	47,104	47,104	2,000	-	2,000	49,104
	1961	13,846	57,394	71,240	2,050	-	2,050	73,290
	1962	30,592	30,568	61,160	-	-	-	61,160
	1963	-	19,794	19,794	-	-	-	19,794
	1964	-	25,940	25,940	-	-	-	25,940
% Change	1964/1954	-	-	-	-	-	-	-
	1964/1963	-	31.0	31.0	-	-	-	31.0
Port Maitland								
	1954	-	-	-	-	83,186	83,186	83,186
	1958	-	-	-	-	73,470	73,470	73,470
	1959	-	-	-	-	34,842	34,842	34,842
	1960	-	100	100	-	2,521	2,521	2,621
	1961	-	3,000	3,000	-	38,679	38,679	41,679
	1962	-	-	-	-	10,196	10,196	10,196
	1963	1,450	1,450	2,900	-	37,010	37,010	39,910
	1964	-	-	-	-	12,696	12,696	12,696
% Change	1964/1954	-	-	-	-	-84.7	-84.7	-84.7
	1964/1963	-	-	-	-	-65.7	-65.7	-68.2

Cargo Handled At Selected Ports,
Niagara Region, 1964

	In Coastwise Shipping			In Foreign Shipping			Total Cargo Handled
	Loaded	Unloaded	Total	Loaded	Unloaded	Total	
	(Cargo Tons)						
Hamilton							
Meat Fresh or Frozen	-	-	-	36	-	36	36
Fish Canned	-	-	-	-	2	2	2
Milk Powder	-	-	-	20	-	20	20
Wheat	50,898	154,072	204,970	-	-	-	204,970
Wheat Flour	-	-	-	-	25	25	25
Grain, Cereal Prep. N.E.S.	-	-	-	-	5	5	5
Fruit Fresh, Frozen N.E.S.	-	-	-	3	293	296	296
Fruits Dried Preserved	-	-	-	-	4,296	4,296	4,296
Fruit Preparations N.E.S.	-	-	-	839	1,049	1,888	1,888
Vegetable, Fresh, Frozen N.E.S.	-	-	-	344	79	423	423
Beans and Peas Dried	-	-	-	904	-	904	904
Vegetable Preps. N.E.S.	-	-	-	1,400	3,167	4,567	4,567
Sugar	-	-	-	-	3,878	3,878	3,878
Molasses Crude	-	-	-	-	9,609	9,609	9,609
Sugar Preparations	-	-	-	-	439	439	439
Spices	-	-	-	-	9	9	9
Food Preparations N.E.S.	-	-	-	339	71	410	410
Soya Bean Oil Cake Meal	-	-	-	31,763	-	31,763	31,763
Oil Seed Cake Meal N.E.S.	-	-	-	473	-	473	473
Feeds Concent, Complete	-	-	-	43	-	43	43
Wines	-	-	-	32	31	63	63
Dist. Alcoholic Beverage	-	-	-	2	80	82	82
Tobacco	-	-	-	2,120	3	2,123	2,123
Foods Feeds Bev. N.E.S.	-	-	-	-	5	5	5
Raw Hides and Skins	-	-	-	253	-	253	253
Soya Beans	-	-	-	453	114,478	114,931	114,931
Rubber and Gums Nat.	-	-	-	-	4,542	4,542	4,542
Crude Vegetable Material N.E.S.	-	-	-	-	33	33	33
Logs, Round Timber	-	-	-	746	-	746	746
Wool and Animal Hair	-	-	-	-	18	18	18
Textile Fibres N.E.S.	-	-	-	-	4,958	4,958	4,958
Iron Ore and Conc.	-	55,334	55,334	-	4,061,760	4,061,760	4,117,094
Nickel Ore and Conc.	-	-	-	862	-	862	862
Zinc Ore and Conc.	-	-	-	-	11	11	11
Met. Ores and Conc. N.E.S.	-	-	-	115	-	115	115
Iron and Steel Scrap	-	-	-	206	79,741	79,947	79,947
Non-Ferrous Met. Scrap	-	6	6	-	5,753	5,753	5,759
Slag Dross By-Products	7,187	-	7,187	1,821	-	1,821	9,008
Coal Anthracite	-	-	-	-	24,974	24,974	24,974
Coal Bituminous	-	-	-	-	3,177,688	3,177,688	3,177,688
Clay Materials N.E.S.	-	-	-	-	24,514	24,514	24,514
Sand and Gravel	-	126,305	126,305	-	18,290	18,290	144,595
Crushed Stone	-	-	-	-	171	171	171
Barytes	-	-	-	-	1,064	1,064	1,064
Fluorspar	-	7,309	7,309	7,778	41,399	49,177	56,486
Phosphate Rock	-	-	-	-	24,214	24,214	24,214

	In Coastwise Shipping			In Foreign Shipping			Total Cargo Handled
	Loaded	Unloaded	Total	Loaded	Unloaded	Total	
			(Cargo Tons)				
Sulphur	-	-	-	-	49	49	49
Non-Metallic Min. Crude N. E. S.	-	-	-	-	5	5	5
Waste and Serap N. E. S.	16,479	-	16,479	512	57	569	17,048
Rubber Fab. Materials	-	-	-	111	118	229	229
Lumber and Timber	-	-	-	1,257	262	1,519	1,519
Sawmill Products N. E. S.	-	-	-	638	52	690	690
Wood Fab. Materials N. E. S.	-	1	1	88	-	88	89
Wood Pulp	-	407	407	-	-	-	407
Newsprint Paper	-	219	219	-	-	-	219
Paper N. E. S.	-	-	-	38	-	38	38
Paperboard	-	4,551	4,551	926	-	926	5,477
Sacking Materials	-	-	-	-	208	208	208
Textile Fab. Materials N. E. S.	-	-	-	61	1,147	1,208	1,208
Fish, Marine Animal Oil	-	-	-	-	115	115	115
Soya Bean Oil	-	-	-	226	-	226	226
Vegetable Oils Fats N. E. S.	-	-	-	6	36	42	42
Oils Fats Waxes N. E. S.	-	-	-	289	96	385	385
Chemicals N. E. S.	13,230	5,600	18,830	13,573	29,514	43,087	61,917
Fertilizer	-	6,825	6,825	-	7,300	7,300	14,125
Synthetic Rubber	-	-	-	214	-	214	214
Chemical Products N. E. S.	-	-	-	476	164	640	640
Gasoline	-	27,316	27,316	-	-	-	27,316
Fuel Oil	10,670	470,627	481,297	-	47,828	47,828	529,125
Lubricating Oil, Grease	-	800	800	-	954	954	1,754
Tar Pitch and Creosote	6,700	12,853	19,553	10,015	2,400	12,415	31,968
Petroleum Coal Products N. E. S.	-	-	-	58	-	58	58
Ferro-Alloys	-	-	-	-	146	146	146
Pig Iron	-	4,321	4,321	-	7,146	7,146	11,467
Iron Steel Ingot Slab	-	-	-	252	295	547	547
Steel Bar and Rod	-	-	-	9,299	12,165	21,464	21,464
Steel Plate and Sheet	1,450	492	1,942	78,806	9,119	87,925	89,867
Structural Shapes	-	222	222	214	10,448	10,662	10,884
Iron Steel Pipes N. E. S.	-	-	-	323	2,470	2,793	2,793
Iron and Steel N. E. S.	498	103	601	195	4,674	4,869	5,470
Aluminum Bar Ingot	-	-	-	-	18	18	18
Aluminum N. E. S.	-	-	-	-	16	16	16
Copper Alloyed	-	-	-	-	13	13	13
Copper and Alloys N. E. S.	-	-	-	674	-	674	674
Nickel and Alloys	-	-	-	1,556	1,710	3,226	3,266
Non-Ferrous Metals N. E. S.	-	-	-	353	1,073	1,426	1,426
Metals Fab. Products N. E. S.	-	-	-	163	370	533	533
Sewer Pipe, Drain Tile	-	-	-	113	-	113	113
Plate and Sheet Glass	-	-	-	20	163	183	183
Cement	-	-	-	-	362	362	362
Concrete Products N. E. S.	-	-	-	-	103	103	103
Lime	-	-	-	-	34	34	34
Non-Metallic Mineral Products N. E. S.	-	-	-	8,808	2,169	10,977	10,977

	In Coastwise Shipping			In Foreign Shipping			Total Cargo Handled
	Loaded	Unloaded	Total	Loaded	Unloaded	Total	
			(Cargo Tons)				
Misc. Fab. Materials N. E. S.	-	-	-	-	3,226	3,226	3,226
Machinery	525	400	925	586	4,130	4,716	5,641
Railway Rolling Stock	-	-	-	-	258	258	258
Autos and Chassis	-	-	-	296	3,664	3,960	3,960
Motor Vehicle Parts N. E. S.	-	17	17	3,027	60	3,087	3,104
Motor Vehicles N. E. S.	-	-	-	-	174	174	174
Misc. Vehicle and Parts N. E. S.	-	-	-	20	-	20	20
Rubber Tires and Tubes	-	-	-	446	20	466	466
Misc. Equipment N. E. S.	-	-	-	110	525	635	635
Household Goods N. E. S.	-	-	-	79	1,702	1,781	1,781
Containers Empty	-	2	2	-	-	-	2
Containers N. E. S.	-	-	-	18	71	89	89
Misc. Products N. E. S.	-	-	-	-	15	15	15
General Cargo	390,560	39,776	430,336	16,875	12,237	29,112	459,448
Total	498,197	917,558	1,415,755	201,273	7,775,530	7,976,803	9,392,558
Port Colborne							
Milk Powder	-	-	-	-	286	286	286
Dairy Produce Eggs N. E. S.	-	-	-	-	6	6	6
Barley	6,196	9,313	15,509	-	-	-	15,509
Corn	3,500	-	3,500	-	3,500	3,500	7,000
Oats	3,561	6,352	9,913	-	-	-	9,913
Wheat	451,161	835,937	1,287,098	-	13,110	13,110	1,300,208
Wheat Flour	19,525	-	19,525	47,736	-	47,736	67,261
Iron Ore and Conc.	-	172,503	172,503	-	228,171	228,171	400,674
Nickel Ore and Conc.	-	-	-	-	607	607	607
Coal Bituminous	-	-	-	-	202,669	202,669	202,669
Dolomite	89,456	-	89,456	1,221,264	-	1,221,264	1,310,720
Sand and Gravel	-	8,298	8,298	-	1,000	1,000	9,298
Fuel Oil	-	99,304	99,304	-	-	-	99,304
Ferro-Alloys	-	-	-	-	6,500	6,500	6,500
Pig Iron	719	-	719	56,544	-	56,544	57,263
Iron Steel Ingot Slab	-	542	542	-	-	-	542
Steel Bar and Rod	103	1,441	1,544	-	-	-	1,544
Steel Plate and Sheet	46	16,737	16,783	-	-	-	16,783
Structural Shapes	14	20,346	20,360	-	-	-	20,360
Rails, Track Material	-	2,525	2,525	-	-	-	2,525
Iron and Steel N. E. S.	501		501	-	-	-	501
Nickel and Alloys	43		43	-	-	-	43
Metal Fab. Products N. E. S.	7		7	-	-	-	7
Cement	3,016		3,016	29,952		29,952	32,968
Non-Metallic Mineral Products N. E. S.	-	-	-	118	-	118	118
Machinery	-	50	50	-	-	-	50
General Cargo	-	-	-	494	-	494	494
Total	577,848	1,173,348	1,751,196	1,356,108	455,849	1,811,957	3,563,153
Thorold							
Food Preparations N. E. S.	50	-	50	-	-	-	50
Seeds For Sowing N. E. S.	-	-	-	-	45	45	45

	In Coastwise Shipping			In Foreign Shipping			Total Cargo
	Loaded	Unloaded	Total	Loaded	Unloaded	Total	Handled
			(Cargo Tons)				
Thorold (cont'd)							
Pulpwood	-	324,270	324,270	395	-	395	324,665
Sand and Gravel	-	27,220	27,220	-	-	-	27,220
Aluminum Ore and Conc.	-	-	-	-	48,127	48,127	48,127
Coal Bituminous	-	-	-	-	206,090	206,090	206,090
Wood Pulp	-	1,600	1,600	6,368	-	6,368	7,968
Fuel Oil	-	11,300	11,300	-	-	-	11,300
Newsprint Paper	-	-	-	135,993	2	135,995	135,995
Paperboard	-	-	-	617	-	617	617
Chemicals N. E. S.	-	-	-	6	408	414	414
Chemical Products N. E. S.	-	-	-	35	-	35	35
Coke	-	-	-	-	11,596	11,596	11,596
Ferro-Alloys	2,090	100	2,190	-	99	99	2,289
Structural Shapes	24	-	24	-	-	-	24
Steel Plate and Sheet	-	-	-	-	21	21	21
Iron and Steel N. E. S.	-	-	-	-	17	17	17
Iron Steel Pipes N. E. S.	75	-	75	-	-	-	75
Nickel and Alloys	-	-	-	-	3,194	3,194	3,194
Non-Ferrous Metals N. E. S.	-	-	-	-	1,083	1,083	1,083
Non-Metallic Mineral Products N. E. S.	-	-	-	328	-	328	328
Autos and Chassis	-	62	62	-	-	-	62
Containers Empty	-	140	140	-	-	-	140
Containers N. E. S.	100	-	100	-	-	-	100
Misc. Equipment N. E. S.	-	-	-	-	16	16	16
General Cargo	35,728	7,144	42,872	-	62	62	42,934
Total	38,067	371,836	409,903	143,742	270,760	414,502	824,405
St. Catharines							
Iron Ore and Conc.	-	3,472	3,472	-	-	-	3,472
Met. Ores and Conc. N. E. S.	-	-	-	-	16,363	16,363	16,363
Coal Bituminous	-	2,119	2,119	-	19,751	19,751	21,870
Sand and Gravel	-	129,747	129,474	-	52,939	52,939	182,413
Limestone	-	-	-	-	2,122	2,122	2,122
Chemicals N. E. S.	-	-	-	7,612	850	8,462	8,462
Chemical Products N. E. S.	-	-	-	432	450	882	882
Fuel Oil	-	149,927	149,927	-	-	-	149,927
Lubricating Oil, Grease	-	-	-	105	-	105	105
Machinery	-	-	-	-	143	143	143
Misc. Vehicle and Parts N. E. S.	-	-	-	-	47	47	47
Household Goods N. E. S.	-	-	-	1		1	1
Total	-	284,992	284,992	8,150	92,665	100,815	385,807
Niagara Bar							
Sand and Gravel	382,678	-	382,678	42,490	-	42,490	425,168
Total	382,678	-	382,678	42,490	-	42,490	425,168
Welland							
Coal Bituminous	850	-	850	-	6,955	6,955	7,805
Chemical Products N. E. S.	-	-	-	2	-	2	2
Sand and Gravel	600	11,169	11,769	-	-	-	11,769
Stone Crude N. E. S.	-	23,893	23,893	-	-	-	23,893

	In Coastwise Shipping			In Foreign Shipping			Total Cargo Handled
	Loaded	Unloaded	Total	Loaded	Unloaded	Total	
			(Cargo Tons)				
Welland (cont'd)							
Non-Metallic Mineral Crude N. E. S.	-	20,755	20,755	-	-	-	20,755
Fuel Oil	-	49,244	49,244	-	-	-	49,244
Coke	-	-	-	4,088	-	4,088	4,088
Steel Plate and Sheet	2	1,223	1,225	-	2,966	2,966	4,191
Structural Shapes	-	1,181	1,181	-	-	-	1,181
Non-Metallic Mineral Products N. E. S.	500	-	500	3,166	-	3,166	3,666
General Cargo	-	177	177	-	-	-	177
Total	1,952	107,642	109,594	7,256	9,921	17,177	126,771
Niagara Falls							
Sand and Gravel	-	25,940	25,940	-	-	-	25,940
Total	-	25,940	25,940	-	-	-	25,940
Port Maitland							
Coal Bituminous	-	-	-	-	12,696	12,696	12,696
Total	-	-	-	-	12,696	12,696	12,696

Principal Commodities Carried
On The Welland Canal, 1964

	Upbound	Downbound (Cargo Tons)	Total Cargo
Iron Ore	12,682,672	4,095,299	16,777,971
Wheat	-	9,815,606	9,815,606
Coal, Bituminous	11,931	6,321,647	6,333,578
Corn	-	3,529,011	3,529,011
Barley	67,854	1,381,123	1,448,977
Soya Beans	-	1,452,496	1,452,496
Oats	-	473,315	473,315
Stone, Crushed and Broken	1,025,900	36,062	1,061,962
Fuel Oil	503,653	514,606	1,018,259
Newsprint Paper	459,871	-	459,871
Structural Shapes and Sheet Piling	440,511	5,984	446,495
Fodder and Feed	-	316,436	316,436
Total, Principal Commodities	15,192,392	27,941,585	43,133,977
Grand Total	18,555,000	32,861,382	51,416,382
Total Principal Commodities as % of Grand Total	81.9	85.0	83.9

Summary Of Traffic
On The Welland Canal, 1954 To 1964

	Vessels in Transit			Cargo Tons		
	Upbound	Downbound	Total	Upbound	Downbound	Total
	No.	No.	No.	No.	No.	No.
1954	4,302	4,177	8,479	2,395,791	15,118,467	17,514,258
1955	4,697	4,637	9,334	4,259,992	16,633,580	20,893,572
1956	4,716	4,644	9,360	5,069,312	17,996,949	23,066,261
1957	4,602	4,552	9,154	5,140,672	17,231,866	22,372,538
1958	4,405	4,331	8,736	5,005,587	16,268,607	21,274,194
1959	4,346	4,303	8,649	9,596,566	17,909,458	27,506,024
1960	4,136	4,033	8,169	8,399,723	20,881,014	29,280,737
1961	4,104	4,101	8,205	7,644,652	23,759,718	31,404,370
1962	4,035	4,001	8,036	10,916,370	24,594,239	35,510,609
1963	3,955	3,915	7,870	13,178,501	28,147,028	41,325,529
1964	4,127	4,150	8,277	18,555,000	32,861,382	51,416,382

Value Of Building Permits Issued, Selected Centres,
Niagara Region, 1965

	Total		Residential		Industrial		Commercial		Institutional and Government	
	($000's)	%	($000's)	%	($000's)	%	($000's)	%	($000's)	%
A - Burlington										
Brantford	14,712	(100.0)	5,621	38.2	4,409	30.0	2,309	15.7	2,373	16.1
Metro Hamilton	103,227	(100.0)	49,864	48.3	19,311	18.7	10,506	10.2	23,546	22.8
Paris	950	(100.0)	579	60.9	250	26.3	53	5.6	68	7.2
B - Niagara										
Beamsville	2,200	(100.0)	527	24.0	18	0.8	38	1.7	1,617	73.5
Caledonia	301	(100.0)	271	90.0	20	6.7	10	3.3	-	-
Chippawa	532	(100.0)	370	69.5	-	-	28	5.3	134	25.2
Crystal Beach	100	(100.0)	83	83.0	-	-	17	17.0	-	-
Dunnville	882	(100.0)	377	42.7	440	50.0	65	7.3	-	-
Fonthill	306	(100.0)	60	19.6	17	5.6	11	3.6	218	71.2
Fort Erie	3,015	(100.0)	402	13.3	585	19.4	205	6.8	1,823	60.5
Grimsby	831	(100.0)	700	84.2	19	2.3	66	7.9	46	5.6
Hagersville	215	(100.0)	79	36.7	2	0.9	18	8.4	116	54.0
Jarvis	32	(100.0)	17	53.1	5	15.6	10	31.3	-	-
Niagara (Town)	771	(100.0)	585	75.9	72	9.3	24	3.1	90	11.7
Niagara Falls	13,779	(100.0)	3,505	25.4	1,522	11.1	6,024	43.7	2,728	19.8
Port Colborne	1,418	(100.0)	836	59.0	4	0.3	230	16.2	348	24.5
St. Catharines	44,049	(100.0)	18,361	41.7	10,752	24.4	6,711	15.2	8,225	18.7
Thorold	687	(100.0)	298	43.4	338	49.2	15	2.2	36	5.2
Welland	8,212	(100.0)	3,395	41.3	572	7.0	313	3.8	3,932	47.9
Niagara Region	216,542	(100.0)	96,533	44.6	43,912	20.3	27,625	12.7	48,472	22.4

Value Of Building Permits Issued,
Niagara Region, 1961 To 1965

		Total	Residential	Industrial	Commercial	Institutional and Government	Other
1961	($000's)	97,415	45,286	15,411	18,208	18,456	54
	%	(100.0)	(46.5)	(15.8)	(18.7)	(18.9)	(0.1)
1962	($000's)	109,876	50,941	9,812	19,328	29,795	-
	%	(100.0)	(46.4)	(8.9)	(17.6)	(27.1)	
1963	($000's)	134,847	68,084	18,273	21,769	26,721	-
	%	(100.0)	(50.5)	(13.6)	(16.1)	(19.8)	
1964	($000's)	172,596	93,672	21,167	32,166	25,591	-
	%	(100.0)	(54.3)	(12.3)	(18.6)	(14.8)	
1965	($000's)	216,542	96,533	43,912	27,625	48,472	-
	%	(100.0)	(44.6)	(20.3)	(12.7)	(22.4)	
Percentage Increase 1965/1961		(122.3)	(113.2)	(184.9)	(51.7)	(162.6)	-

Assessment Equalization Factors, Niagara
Region Municipalities, 1965

A - Burlington

Brant

Brantford (City)	43
Brantford (Twp.)	25
Burford	20
Dumfries, South	27
Oakland	21
Onondaga	22
Paris	28

Wentworth

Ancaster	30
Beverly	23
Binbrook	29
Dundas	28
Flamborough, East	33
Flamborough, West	22
Glanford	24
Hamilton	34
Saltfleet	30
Stoney Creek	30
Waterdown	33

B - Niagara

Haldimand

Caledonia	29
Canborough	27
Cayuga	38
Cayuga, North	28
Cayuga, South	20
Dunn	27
Dunnville	28
Hagersville	27
Jarvis	32
Moulton	28
Oneida	26
Rainham	29
Seneca	27
Sherbrooke	24
Walpole	25

Lincoln

Beamsville	29
Caistor	29
Clinton	29
Gainsborough	29
Grimsby	29
Grimsby, North	29
Grimsby, South	29
Louth	29
Niagara (Town)	29
Niagara (Twp.)	29
St. Catharines	31

Welland

Bertie	41
Chippawa	34
Crowland	30
Crystal Beach	49
Fonthill	34
Fort Erie	37
Humberstone	33
Niagara Falls	35
Pelham	31
Port Colborne	35
Thorold (Town)	35
Thorold (Twp.)	32
Wainfleet	36
Welland	33
Willoughby	35

Table 1

SELECTED MUNICIPAL FINANCIAL STATISTICS
1965
NIAGARA REGION MUNICIPALITIES

Municipality	Assessed Population	Taxable Assessment: Total Amount $	Taxable Assessment: Total Per Capita $	Taxable Assessment: Residential $	Taxable Assessment: Commercial $	Taxable Assessment: Res.-Comm. Ratio	Per Capita Taxation: Total $	Per Capita Taxation: Residential $	Tax Collections Total Current And Arrears As a Percent Of Total Taxation %	Revenue From Provincial Sources As a Percent Of Total Revenue %	Net Debenture Debt: Amount $	Net Debenture Debt: Per Capita $	Net Debenture Debt: Per Cent of Assessment %
A - Burlington													
Brant													
Brantford (City)	57,338	123,691,615	2,157	72,032,770(2)	50,865,290(2)	59-41	141.48	83.47	98.95	25.3	14,089,547	245.73	11.39
Brantford (Twp.)	8,684	14,339,325	1,651	10,086,750	4,252,575	70-30	127.39	89.17	98.39	32.1	1,319,150	151.90	9.20
Burford	5,440	7,078,346	1,301	6,406,675	671,671	91-9	81.20	73.89	102.22	50.4	740,616	136.14	10.46
Dumfries, South	3,477	4,422,130	1,272	3,499,325	922,805	79-21	77.37	61.12	103.72	45.2	137,264	39.48	3.10
Oakland	1,344	1,399,068	1,041	1,274,000	125,068	91-9	67.19	61.14	98.26	38.8	157,891	117.48	11.29
Onondaga	1,234	1,492,825	1,210	1,449,550	43,275	97-3	70.15	68.05	101.45	49.2	90,284	73.16	6.05
Paris	6,115	7,263,934	1,188	4,472,425	2,791,509	62-38	102.29	63.42	99.72	28.7	1,143,623	187.02	15.74
County Administration(1)	26,294	35,995,628	1,369				17.16			49.9	-	-	
County Totals & Averages	83,632	159,687,243	1,909	99,221,495	59,672,193	62-38	128.32	79.56	99.20	30.4	17,678,375	211.38	
Wentworth													
Ancaster	14,572	18,809,908	1,291	16,735,525	2,074,383	89-11	105.00	93.45	100.71	41.8	2,717,822	186.51	14.45
Beverly	5,523	6,441,191	1,166	5,056,441	1,384,750	79-21	68.18	53.86	103.19	46.5	459,757	83.24	7.14
Binbrook	2,989	3,967,454	1,327	3,457,116	510,338	87-13	75.80	65.95	98.58	50.6	434,524	145.37	10.95
Dundas	14,908	20,756,320	1,392	15,264,924	5,491,396	74-26	119.47	88.41	101.45	30.2	3,882,843	260.45	18.71
Flamborough, East	4,920	7,011,492	1,425	5,801,887	1,209,605	83-17	82.95	68.85	98.67	36.8	600,573	122.07	8.57
Flamborough, West	7,612	9,485,014	1,246	7,972,863	1,512,151	84-16	72.36	60.78	100.19	45.8	870,247	114.32	9.20
Glanford	5,552	5,697,165	1,026	5,092,570	604,595	89-11	70.20	62.48	103.63	53.1	568,727	102.44	9.98
Hamilton	280,591	591,732,340	2,109	315,983,380(3)	275,758,840(3)	53-47	158.31	83.90	99.37	23.7	97,675,594	348.11	16.51
Saltfleet	17,672	22,206,626	1,257	17,373,107	4,833,519	78-22	107.02	83.48	101.76	38.5	4,199,252	237.62	18.91
Stoney Creek	7,235	10,292,923	1,423	8,252,659	2,040,264	80-20	105.91	84.73	98.77	32.8	1,542,556	213.21	14.99
Waterdown	1,925	2,909,677	1,512	2,135,465	774,212	73-27	120.85	88.22	88.53	30.9	379,232	197.00	13.03
County Administration(1)	82,908	107,577,770	1,298				14.00			8.3	1,023,500	12.35	
County Totals & Averages	363,499	699,310,110	1,924	403,125,937	296,194,053	58-42	144.63	83.89	99.57	26.2	114,354,627	314.59	
B - Niagara													
Haldimand													
Caledonia	2,644	2,819,665	1,066	2,151,295	668,370	76-24	85.81	65.22	98.60	36.9	289,870	109.63	10.28
Canborough	1,229	1,306,320	1,063	1,160,810	145,510	89-11	74.04	65.90	95.20	56.5	118,294	96.25	9.06
Cayuga	1,008	1,266,905	1,257	880,265	386,640	69-31	87.02	60.04	106.33	37.1	148,591	147.41	11.73
Cayuga, North	1,481	2,110,370	1,425	1,746,380	363,990	83-17	92.22	76.54	99.81	47.5	146,643	99.02	6.95
Cayuga, South	635	600,547	946	514,530	86,017	86-14	79.97	68.77	97.42	46.1	16,835	26.51	2.80
Dunn	1,165	1,800,180	1,545	1,583,790	216,390	88-12	96.84	85.22	102.08	44.9	121,398	104.20	6.74
Dunnville	5,686	8,076,105	1,420	4,348,130	3,727,975	54-46	110.68	59.77	101.53	30.2	832,880	146.48	10.31
Hagersville	2,144	2,522,270	1,176	1,671,050	851,220	66-34	97.47	64.33	99.87	35.7	284,452	132.67	11.28
Jarvis	751	867,840	1,156	538,170	329,670	62-38	76.23	47.26	102.96	41.2	8,017	10.68	0.93
Moulton	2,378	2,404,930	1,011	2,070,130	334,800	86-14	65.81	56.60	102.51	45.1	210,966	88.72	8.77
Oneida	1,617	2,826,820	1,748	1,871,350	955,470	66-34	108.82	71.82	99.27	50.1	155,621	96.24	5.51
Rainham	1,792	3,026,310	1,689	2,597,820	428,490	86-14	94.50	81.27	100.05	49.0	277,880	155.07	9.18
Seneca	2,217	3,528,362	1,592	2,458,533	1,069,829	70-30	99.47	69.63	102.00	50.1	193,410	87.24	5.48
Sherbrooke	371	2,021,160	5,448	678,680	1,342,480	34-66	311.93	106.06	99.52	32.7	34,400	92.72	1.70
Walpole	3,957	5,689,617	1,438	4,836,420	853,197	85-15	94.62	80.43	96.49	48.0	509,144	128.67	8.95
County Administration(1)	29,075	40,867,401	1,406				24.94			43.9	920,500	31.66	
County Totals & Averages	29,075	40,867,401	1,406	29,107,353	11,760,048	71-29	96.78	68.71	100.11	42.4	4,268,901	146.82	

(Cont'd)

Table 1 (cont'd)

SELECTED MUNICIPAL FINANCIAL STATISTICS
1965
NIAGARA REGION MUNICIPALITIES

Municipality	Assessed Population	Taxable Assessment: Total Amount $	Taxable Assessment: Total Per Capita $	Taxable Assessment: Residential $	Taxable Assessment: Commercial $	Res. - Comm. Ratio	Per Capita Taxation: Total $	Per Capita Taxation: Residential $	Tax Collections Total Current And Arrears As a Percent Of Total Taxation %	Revenue From Provincial Sources As a Percent Of Total Revenue %	Net Debenture Debt: Amount $	Net Debenture Debt: Per Capita	Net Debenture Debt: Percent Of Assessment %
B - Niagara													
Lincoln													
Beamsville	3,685	4,238,355	1,150	3,442,940	795,415	81-19	90.45	73.27	100.22	36.8	653,918	177.45	15.43
Caistor	1,785	2,041,015	1,143	1,827,800	213,215	90-10	65.21	58.69	99.47	67.8	274,433	153.74	13.45
Clinton	5,445	7,450,130	1,368	6,600,415	849,715	89-11	100.48	89.43	99.35	40.8	444,890	81.71	5.97
Gainsborough	2,824	2,900,525	1,027	2,577,780	322,745	89-11	57.17	50.88	98.26	56.5	185,940	65.84	6.41
Grimsby	6,128	9,185,245	1,499	6,735,505	2,449,740	73-27	134.05	97.86	98.28	28.0	1,169,691	190.88	12.73
Grimsby, North	6,737	9,046,845	1,342	8,282,745	764,100	92-8	102.23	94.05	99.32	38.9	1,323,232	196.41	14.63
Grimsby, South	2,551	3,706,645	1,453	2,576,305	1,130,340	70-30	98.25	68.78	99.51	44.1	348,509	136.62	9.40
Louth	5,203	7,462,785	1,434	5,912,695	1,550,090	79-21	100.08	79.06	96.12	44.3	400,390	76.95	5.37
Niagara (Town)	2,880	3,281,650	1,139	2,626,025	655,625	80-20	99.16	79.33	100.98	41.0	211,939	73.59	6.46
Niagara (Twp.)	8,932	11,279,075	1,263	8,926,505	2,352,570	79-21	97.69	77.18	102.11	46.9	1,773,547	198.56	15.72
St. Catharines	91,376	138,242,530	1,513	88,438,920	49,803,610	64-36	125.79	80.51	99.37	30.1	16,007,035	175.18	11.58
County Administration (1)	46,170	60,592,270	1,312				19.46			30.7	-	-	
County Totals & Averages	137,546	198,834,800	1,446	137,947,635	60,887,165	69-31	117.00	80.73	99.39	33.8	22,793,524	165.72	
Welland													
Bertie	8,860	24,548,550	2,771	18,907,675	5,640,875	77-23	163.38	125.80	98.13	27.6	1,356,327	153.08	5.53
Chippawa	3,749	7,818,525	2,086	3,974,000	3,844,525	51-49	131.15	66.89	100.99	28.7	980,357	261.50	12.54
Crowland	1,942	3,262,493	1,680	1,817,128	1,445,365	56-44	87.62	49.07	105.38	22.3	236,331	121.69	7.24
Crystal Beach	1,837	4,914,850	2,675	3,552,150	1,362,700	72-28	176.79	127.29	97.77	22.5	267,736	145.75	5.45
Fonthill	2,770	4,035,450	1,457	3,540,475	494,975	88-12	105.91	93.20	98.31	39.4	283,743	102.43	7.03
Fort Erie	9,329	16,221,848	1,739	9,279,945	6,941,903	57-43	120.19	68.51	100.28	25.1	970,403	104.02	5.99
Humberstone	4,723	10.022,275	2,122	6,434,900	3,587,375	64-36	115.92	74.19	97.73	40.8	287,591	60.89	2.87
Niagara Falls	53,611	114,988,510	2,145	55,827,580	59,160,930	49-51	162.00	79.38	96.89	26.8	13,907,129	259.41	12.09
Pelham	5,062	6,555,895	1,295	5,721,625	834,270	87-13	79.51	69.17	100.94	48.2	438,219	86.57	6.68
Port Colborne	17,526	32,995,170	1,883	15,908,415	17,086,755	48-52	116.31	55.83	99.90	32.1	2,109,122	120.34	6.39
Thorold (Town)	8,698	12,003,945	1,380	7,673,275	4,330,670	64-36	104.86	67.11	100.19	29.8	1,089,068	125.21	9.07
Thorold (Twp.)	7,794	15,351,070	1,970	6,369,040	8,982,030	41-59	118.36	48.53	102.03	32.6	983,992	126.25	6.41
Wainfleet	4,848	8,671,125	1,789	7,432,325	1,238,800	86-14	98.59	84.79	101.36	46.9	441,201	91.01	5.09
Welland	37,892	71,905,065	1,898	35,722,860	36,182,205	50-50	146.17	73.09	96.84	29.0	12,494,423	329.74	17.38
Willoughby	2,087	3,340,975	1,601	2,737,600	603,375	82-18	84.43	69.23	104.24	34.7	135,922	65.13	4.07
County Administration (1)	79,225	149,742,171	1,890				14.61			33.0	611,126	7.71	
County Totals & Averages	170,728	336,635,746	1,972	184,898,993	151,736,753	55-45	137.94	75.87	98.12	29.8	36,592,690	214.33	
Regional Totals & Averages													
Local Municipalities	784,480	1,435,335,300	1,830	854,301,413	580,250,212	60-40	134.82	80.89	99.19	29.2	193,132,991	246.19	
Administrative Counties (1)	263,672	394,775,240	1,497				16.67			32.7	2,555,126	9.69	
Total, Niagara Region	784,480	1,435,335,300	1,830	854,301,413	580,250,212	60-40	134.82	80.89	99.19	29.4	195,688,117	249.45	
Total, Province of Ontario	6,496,812	12,359,283,078	1,902				135.87		99.29		2,114,046,152	325.40	
Burlington	58,385	113,291,832	1,940	85,755,155	27,536,677	76-24	144.13	109.54	100.27	26.6	18,917,242	324.01	16.70
Administration Counties (1)													
Brant	26,294	35,995,628	1,369				17.16			49.9	-	-	
Wentworth	82,908	107,577,770	1,298				14.00			8.3	1,023,500	12.35	
Haldimand	29,075	40,867,401	1,406				24.94			43.9	920,500	31.66	
Lincoln	46,170	60,592,270	1,312				19.46			30.7	-	-	
Welland	79,225	149,742,171	1,890				14.61			33.0	611,126	7.71	
Totals & Averages	263,672	394,775,240	1,497				16.67			32.7	2,555,126	9.69	

(1) County Administration Population and Assessment Figures Exclude Cities, Per Capita Taxation is County Rates Per Capita and Remaining Figures are Based on County's own Revenue and Debt.

Table 2

SELECTED MUNICIPAL FINANCIAL STATISTICS
1965
NIAGARA REGION MUNICIPALITIES

Municipality	EXPENDITURE											
	Total		Public Welfare		Education		Public Works		Recreation And Community Services		OTHER	
	Amount $	Per Capita $	Amount $	Per Capita $	Amount $	Per Capita $	Amount $	Per Capita $	Amount $	Per Capita $	Amount $	Per Capita $
A - Burlington												
Brant												
Brantford (City)	10,077,941	175.76	339,829	5.92	2,994,008	52.21	766,925	13.38	486,765	8.49	5,490,414	95.76
Brantford (Twp.)	1,592,711	183.41	14,348	1.65	461,554	53.15	302,845	34.88	76,862	8.85	737,102	84.88
Burford	552,176	101.50	9,823	1.80	218,944	40.25	113,408	20.85	6,303	1.16	203,698	37.44
Dumfries, South	365,700	105.18	7,137	2.05	133,020	38.26	103,351	29.72	3,159	0.91	119,033	34.24
Oakland	110,060	81.89	2,418	1.80	49,820	37.07	17,154	12.76	393	0.29	40,275	29.97
Onondaga	107,728	87.30	839	0.68	42,130	34.14	22,559	18.28	1,793	1.45	40,407	32.75
Paris	817,947	133.76	18,693	3.06	243,659	39.85	108,785	17.79	20,999	3.43	425,811	69.63
County Administration	1,529,538	58.17	89,318	3.40	550	0.02	826,321	31.42	-	-	613,349	23.33
County Totals & Averages	15,153,801	181.20	482,405	5.77	4,143,685	49.55	2,261,348	27.04	596,274	7.13	7,670,089	91.71
Wentworth												
Ancaster	1,843,147	126.49	4,554	0.31	896,255	61.51	251,741	17.28	31,253	2.14	659,344	45.25
Beverly	458,232	82.97	-	-	219,740	39.79	86,084	15.59	4,922	0.89	147,486	26.70
Binbrook	278,081	93.03	117	0.04	132,333	44.27	59,006	19.74	5,093	1.70	81,532	27.28
Dundas	2,171,207	145.64	932	0.06	811,837	54.46	165,072	11.07	69,153	4.64	1,124,213	75.41
Flamborough, East	652,124	132.55	-	-	261,670	53.19	92,943	18.89	2,940	0.60	294,571	59.87
Flamborough, West	636,932	83.67	414	0.05	334,497	43.94	98,311	12.92	17,313	2.27	186,397	24.49
Glanford	469,960	84.65	-	-	236,278	42.56	99,818	17.98	2,000	0.36	131,864	23.75
Hamilton	54,029,731	192.56	3,753,130	13.38	16,938,152	60.37	2,712,367	9.67	1,816,420	6.47	28,809,662	102.67
Saltfleet	2,415,979	136.71	-	-	1,051,428	59.49	271,759	15.38	85,533	4.84	1,007,259	57.00
Stoney Creek	893,113	123.44	-	-	355,271	49.10	57,623	7.96	31,023	4.29	449,196	62.09
Waterdown	278,911	144.89	-	-	121,311	63.02	9,841	5.11	7,938	4.12	139,821	72.64
County Administration	1,649,685	19.90	302,444	3.65	75,900	0.91	23,825	0.29	-	-	1,247,516	15.05
County Totals & Averages	65,777,102	180.96	4,061,591	11.17	21,434,672	58.97	3,928,390	10.81	2,073,588	5.71	34,278,861	94.30
B - Niagara												
Haldimand												
Caledonia	329,451	124.60	1,883	0.71	79,320	30.00	42,461	16.06	4,344	1.64	201,443	76.19
Canborough	141,499	115.13	2,271	1.85	43,250	35.19	60,342	49.10	1,425	1.16	34,211	27.83
Cayuga	138,816	137.72	2,870	2.85	32,810	32.55	11,168	11.08	1,995	1.98	89,973	89.26
Cayuga, North	175,858	118.74	2,280	1.54	58,614	39.58	50,923	34.38	764	0.52	63,277	42.72
Cayuga, South	64,442	101.48	587	0.92	24,991	39.35	16,922	26.65	18	0.03	21,924	34.53
Dunn	138,672	119.03	3,500	3.00	57,500	49.36	27,542	23.64	-	-	50,130	43.03
Dunnville	843,583	148.36	30,879	5.43	242,850	42.71	109,744	19.30	8,476	1.49	451,634	79.43
Hagersville	295,826	137.97	8,689	4.05	84,644	39.48	37,248	17.37	9,317	4.34	155,928	72.73
Jarvis	57,915	77.12	949	1.26	26,414	35.17	1,381	1.84	650	0.87	28,521	37.98
Moulton	205,016	86.21	5,030	2.11	75,709	31.84	54,951	23.11	855	0.36	68,471	28.79
Oneida	235,730	145.78	4,639	2.87	84,768	52.42	73,076	45.19	1,400	0.87	71,847	44.43
Rainham	225,508	125.84	2,360	1.32	73,269	40.89	78,609	43.86	1,807	1.01	69,463	38.76
Seneca	274,628	123.87	5,266	2.38	101,243	45.67	74,190	33.46	1,182	0.53	92,747	41.83
Sherbrooke	135,903	366.32	102	0.28	50,992	137.44	34,428	92.80	533	1.44	49,848	134.36
Walpole	510,845	129.10	5,766	1.46	168,420	42.56	193,975	49.02	4,537	1.15	138,147	34.91
County Administration	1,548,546	53.26	171,524	5.90	-	-	1,012,694	34.83	-	-	364,328	12.53
County Totals & Averages	5,322,238	183.05	248,595	8.55	1,204,794	41.44	1,879,654	64.65	37,303	1.28	1,951,892	67.13

(cont'd)

Table 2 (cont'd)

SELECTED MUNICIPAL FINANCIAL STATISTICS
1965
NIAGARA REGION MUNICIPALITIES

Municipality	EXPENDITURE Total Amount $	Total Per Capita $	Public Welfare Amount $	Public Welfare Per Capita $	Education Amount $	Education Per Capita $	Public Works Amount $	Public Works Per Capita $	Recreation And Community Services Amount $	Recreation And Community Services Per Capita $	OTHER Amount $	OTHER Per Capita $
B - Niagara (cont'd)												
Lincoln												
Beamsville	438,048	118.87	4,810	1.30	159,627	43.32	41,850	11.36	10,555	2.86	221,206	60.03
Caistor	283,980	159.09	4,007	2.25	48,340	27.08	185,470	103.90	2,838	1.59	43,325	24.27
Clinton	699,093	128.39	22,768	4.18	272,747	50.09	133,040	24.43	-	-	270,538	49.69
Gainsborough	252,128	89.28	9,379	3.32	80,239	28.41	100,520	35.60	-	-	61,990	21.95
Grimsby	1,035,048	168.90	20,424	3.33	328,485	53.60	76,496	12.48	51,449	8.40	558,194	91.09
Grimsby, North	867,333	128.74	19,886	2.95	327,018	48.54	113,389	16.83	34,117	5.06	372,923	55.36
Grimsby, South	319,757	125.35	3,335	1.31	98,809	38.73	59,335	23.26	921	0.36	157,357	61.69
Louth	671,272	129.02	30,705	5.90	271,610	52.20	116,338	22.36	9,605	1.85	243,014	46.71
Niagara (Town)	376,594	130.76	9,839	3.42	118,884	41.28	36,914	12.82	6,813	2.36	204,144	70.88
Niagara (Twp.)	1,145,587	128.26	12,807	1.43	470,728	52.70	162,333	18.18	2,240	0.25	497,479	55.70
St. Catharines	14,260,285	156.06	715,517	7.83	4,801,076	52.54	1,810,485	19.81	672,489	7.36	6,260,718	68.52
County Administration	1,745,478	37.80	195,924	4.24	26,936	0.58	700,631	15.18	-	-	821,987	17.80
County Totals & Averages	22,094,603	160.63	1,049,401	7.63	7,004,499	50.92	3,536,801	25.71	791,027	5.75	9,712,875	70.62
Welland												
Bertie	1,848,298	208.61	1,750	0.20	668,009	75.40	331,583	37.42	12,328	1.39	834,628	94.20
Chippawa	632,267	168.64	-	-	235,725	62.87	70,602	18.83	5,167	1.38	320,773	85.56
Crowland	672,482	346.28	-	-	79,305	40.83	66,916	34.46	6,198	3.19	520,063	267.80
Crystal Beach	374,023	203.61	60	0.03	145,208	79.05	34,937	19.02	4,789	2.61	189,029	102.90
Fonthill	343,444	123.99	-	-	162,063	58.50	29,380	10.61	22,040	7.96	129,961	46.92
Fort Erie	1,428,386	153.11	314	0.03	556,498	59.65	163,747	17.55	52,613	5.64	655,214	70.24
Humberstone	744,291	157.59	-	-	291,999	61.82	169,579	35.91	19,455	4.12	263,258	55.74
Niagara Falls	11,855,758	221.14	286,850	5.35	3,713,412	69.26	1,372,358	25.60	454,674	8.48	6,028,464	112.45
Pelham	538,856	106.45	-	-	231,141	45.66	123,076	24.31	7,032	1.39	177,607	35.09
Port Colborne	2,486,260	141.86	-	-	821,863	46.89	288,063	16.44	151,193	8.63	1,225,141	69.90
Thorold (Town)	1,240,875	142.66	259	0.03	372,803	42.86	85,188	9.79	69,135	7.95	713,490	82.03
Thorold (Twp.)	1,266,656	162.52	560	0.07	487,222	62.51	99,736	12.80	9,806	1.26	669,332	85.88
Wainfleet	608,386	125.49	67	0.01	296,227	61.10	130,530	26.93	10,577	2.18	170,985	35.27
Welland	6,653,459	175.59	302,301	7.98	2,605,796	68.77	675,741	17.83	272,683	7.20	2,796,938	73.81
Willoughby	249,749	119.67	27	0.01	100,446	48.13	73,992	35.45	1,625	0.78	73,659	35.30
County Administration	2,428,003	30.65	461,251	5.82	13,196	0.17	1,149,825	14.51	-	-	803,731	10.15
County Totals & Averages	33,371,193	195.46	1,053,439	6.17	10,780,913	63.14	4,865,253	28.50	1,099,315	6.44	15,572,273	91.21
Regional Totals & Averages												
Local Municipalities	132,817,687	169.31	5,674,970	7.24	44,451,981	56.66	12,758,150	16.26	4,597,507	5.86	65,335,079	83.29
Administrative Counties	8,901,250	33.76	1,220,461	4.63	116,582	0.44	3,713,296	14.08	-	-	3,850,911	14.61
Total, Niagara Region	141,718,937	180.65	6,895,431	8.79	44,568,563	56.81	16,471,446	21.00	4,597,507	5.86	69,185,990	88.19
Total, Province of Ontario	1,216,255,318	187.21	62,145,840	9.57	395,443,639	60.87	60,723,122	24.74	44,462,346	6.84	553,480,371	85.19
Burlington	10,363,553	177.50	87,191	1.49	4,191,021	71.78	1,141,555	19.55	505,520	8.66	4,438,266	76.02

(3) From January 1, 1963, Stamford Twp. included in Niagara Falls City.

Day Visitors Provincial Park

Origin	42 Eastern Lake Erie % By Region	42 Eastern Lake Erie Absolute # in 000's
Hamilton	22.4	5.5
Niagara	44.9	11.0
Kitchener	4.1	1.0
Windsor	10.2	2.5
Rest Of Ontario	2.0	0.5
Ontario & Canada	83.6	20.5
New York	8.2	2.0
Michigan	4.1	1.0
Illinois	4.1	1.0
United States	16.4	4.0
Total	100.0	24.5

Campers Provincial Parks

Origin	42 Eastern Lake Erie % By Region	42 Eastern Lake Erie Absolute #
Toronto	17.1	700
Hamilton	14.4	580
Niagara	22.7	930
London	2.9	120
Ontario & Canada	57.1	2,340
New York	2.9	120
Michigan	8.6	350
Ohio	2.9	120
Wisconsin	4.1	70
Illinois	5.6	230
Rest Of United States	18.8	770
United States	42.9	1,760
Total	100.0	4,100

Cottage Owners

Origin	42 Eastern Lake Erie % By Region	42 Eastern Lake Erie Absolute #
Toronto	3.0	60
Hamilton	14.6	295
Niagara	33.7	680
Kitchener	1.5	30
Windsor	0.2	5
Ontario & Canada	53.0	1,070
New York	45.8	925
Ohio	0.2	5
Pennsylvania	0.2	5
Rest Of United States	0.8	15
United States	47.0	950
Total	100.0	2,020

Cottage Owners

Origin	43 Niagara River & Lake Ontario % By Region	43 Niagara River & Lake Ontario Absolute #
Toronto	11.6	60
Hamilton	35.0	180
Niagara	45.6	235
London	1.0	5
North Bay	1.0	5
Ontario & Canada	94.2	485
New York	4.8	25
Rest Of United States	1.0	5
United States	5.8	30
Total	100.0	515

Guests At Commercial Resorts

Origin	42 Eastern Lake Erie % By Region	42 Eastern Lake Erie Absolute #
Toronto	2.6	550
Hamilton	11.8	2,520
Niagara	11.2	2,400
London	1.3	280
Windsor	1.3	280
Peterborough	2.6	560
Ontario & Canada	30.8	6,590
New York	29.4	6,290
Michigan	15.4	3,290
Pennsylvania	8.0	1,710
Rest Of United States	16.4	3,520
United States	69.2	14,810
Total	100.0	21,400

Guests At Commercial Resorts

Origin	43 Niagara River & Lake Ontario % By Region	43 Niagara River & Lake Ontario Absolute #
Toronto	3.2	1,770
Hamilton	0.3	170
Niagara	0.4	220
Kitchener	0.6	330
London	1.8	990
Windsor	3.9	2,150
Barrie	0.1	50
Peterborough	0.6	330
Rest Of Ontario	2.9	1,600
Ontario	13.8	7,610
Provs. E.	4.1	2,270
Provs. W.	0.8	440
Canada	18.7	10,320
New York	11.6	6,400
Michigan	18.0	9,940
Ohio	15.3	8,450
Pennsylvania	11.4	6,290
Rest Of United States	24.2	13,360
United States	80.5	44,440
Rest Of World	0.8	440
Total	100.0	55,200

Dwelling Units Started And Completed,
Centres Of 5,000 Population And Over,
Niagara Region, 1961 To 1965

	Started					Completed				
	1961	1962	1963	1964	1965	1961	1962	1963	1964	1965
A - Burlington										
Brantford (Urban Area)	216	326	324	575	613	305	272	235	432	602
Brantford (City)	148	262	246	494	554	211	215	174	345	524
Brantford Twp.	68	64	78	81	59	94	57	61	87	78
Hamilton (Metropolitan)	2,267	2,921	3,868	5,670	4,519	2,643	2,333	2,689	4,970	4,037
Hamilton (City)	1,381	1,800	2,297	3,398	2,096	1,699	1,370	1,308	3,356	2,000
Burlington	481	649	1,085	1,647	1,807	456	462	906	1,116	1,475
Dundas	189	102	130	145	111	201	88	140	103	118
Stoney Creek	10	45	31	178	109	35	82	49	72	123
Waterdown	2	6	4	5	22	2	6	4	4	6
Ancaster Twp. (pt.)	70	82	79	44	56	86	96	65	56	52
Beverly Twp.	-	33	32	23	19	-	38	31	22	26
Binbrook Twp.	-	30	22	24	39	-	30	23	21	35
Flamborough E. Twp.	15	35	31	41	57	23	25	30	44	35
Flamborough W. Twp.	63	31	50	46	60	69	35	39	58	47
Glanford Twp.	-	46	54	63	51	-	38	47	63	63
Saltfleet Twp. (pt.)	56	62	53	56	92	72	63	47	55	57
Paris	18	13	17	36	48	20	12	7	25	46
B - Niagara										
Fort Erie	45	40	40	36	52	39	54	31	36	37
Grimsby	-	60	57	75	63	-	62	41	80	51
Niagara Falls (Urban Area)	179	197	313	290	292	200	182	235	269	279
Niagara Falls (City)	5	6	274	267	263	2	7	214	236	253
Chippawa	17	22	39	23	29	33	20	21	33	26
Stamford Twp.	157	169	(3)	(3)	(3)	165	155	(3)	(3)	(3)
Port Colborne	46	32	26	50	55	54	37	26	49	42
St. Catharines (Urban Area)	417	437	618	1,481	1,308	419	393	558	742	1,701
St. Catharines (City)	364 (1)	371	538	1,380	1,183	367 (1)	315	508	650	1,558
Fonthill	-	17	20	9	4	-	21	20	7	8
Merritton	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Port Dalhousie	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Thorold	9	9	27	11	19	13	8	6	31	16
Grantham Twp.	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Thorold Twp.	44 (2)	40	33	81	102	39 (2)	49	24	54	119
Welland	168 (2)	190	170	209	292	168 (2)	196	153	184	230

(1) From January 1, 1961, Merritton and Port Dalhousie, and Grantham Twp. included in St. Catharines City.
(2) From January 1, 1961, part of Crowland, Humberstone, Pelham and Thorold Twps. incorporated in Welland.
(3) From January 1, 1963, Stamford Twp. included in Niagara Falls City.

Selected Statistics On Recreation

	Brant	Haldimand	Lincoln	Welland	Wentworth
Attendance at Provincial & Conservation Parks 1965	104,643	49,462	49,373*	72,000*	3,000
Cottages	6	3,565	337	1,511	113
Attendance at Childrens Camps	258	268	91	1,178	378
Receipts from Hotels, Motels, Cabins in 000's $	6,615	1,081	4,988	11,010	6,462
Receipts from Hotels, Motels, Cabins as % Total Services	13.6	30.1	27.0	30.8	10.2

* 13 million visited Niagara Commission's Park Lands in 1965.

Numbers Of Non-Resident Automobiles Entering Canada Via The Niagara - Fort Erie Frontier

	1960	%	1961	%	1962	%	1963	%	1964	%
TOTAL	798,361		843,127		888,889		956,113		1,054,068	
Staying 2 days or less	493,950	61.8	522,310	61.9	549,849	61.9	595,511	62.3	667,875	63.5
Staying 3 days +	304,411		320,817		339,040		360,602		386,193	36.5
% Total, Ontario	42.2		41.7		41.7		41.3		41.2	

Port Of Exit Of Those Entering Via Niagara - Fort Erie Frontier

	1960	%	1961	%	1962	%	1963	%	1964	%
St. Lawrence	24,679	3.0	26,279	3.1	28,834	3.2	32,208	3.3	30,014	2.8
Lake Erie	108		126		184		187		136	
Lake St. Clair & Detroit River	85,148	10.6	84,695	10.0	92,106	10.3	97,697	10.2	112,281	10.6
Sault Ste. Marie	4,808		4,851		5,032		7,112		7,805	
Western Ontario	294		594		808		837		980	
Fort Erie & Niagara Falls	665,086	83.3	706,692	83.8	739,709	83.2	794,330	83.0	879,783	83.4

Total Exits Of Non-Resident Automobiles

	1960	1961	1962	1963	1964
TOTAL	781,508	823,601	872,590	943,569	1,038,693
% Total Entering Ontario	42.6	42.5	42.3	42.1	42.0

Cheques Cashed In Clearing Centres,
Selected Urban Areas, Niagara Region, 1965

	Annual Total 1965 $ Billion	Per Cent Of Region %	Per Cent Change 1965/64 %	Per Cent Change 1964/63 %
Brantford	1.04	7.6	12.5	7.7
Hamilton	9.97	72.9	16.3	15.4
Niagara Falls	0.86	6.3	25.7	11.7
St. Catharines	1.80	13.2	19.4	29.4
Total, Niagara Region	13.67	100.0	17.0	16.1
Total, Ontario	229.05 [1]		14.8	17.8

[1] Total Of Reporting Centres.

Department Of Highways Expenditures, Niagara Region, April 1, 1964 To March 31, 1965

	Construction $	Maintenance $	Total $
A - Burlington			
Brant	2,473,537	277,395	2,750,932
Wentworth	4,012,100	767,440	4,779,540
Sub-total	6,485,637	1,044,835	7,530,472
B - Niagara			
Haldimand	450,575	254,565	705,140
Lincoln	4,893,819	471,304	5,365,123
Welland	1,851,894	521,345	2,373,239
Sub-total	7,196,288	1,247,214	8,443,502
Total, Niagara Region	13,681,925	2,292,049	15,973,974
Total, Ontario	140,327,061	44,219,742	184,546,803

Road And Highway Mileages, Niagara Region, 1964

	King's Highways	County Roads	Incorporated Township Roads	Urban Roads	Total
A - Burlington					
Brant	86.1	125.4	539.8	194.4	945.7
Wentworth	149.4	169.5	553.2	541.8	1,413.9
Sub-total	235.5	294.9	1,093.0	736.2	2,359.6
B - Niagara					
Haldimand	74.0	157.8	618.2	62.8	912.8
Lincoln	79.0	160.2	664.1	376.7	1,280.0
Welland	114.5	162.1	1,078.8	493.3	1,848.7
Sub-total	267.5	480.1	2,361.1	932.8	4,041.5
Total, Niagara Region	503.0	775.0	3,454.1	1,669.0	6,401.1
Total, Ontario	9,722.2	9,561.5	57,687.7(1)	10,178.1	87,149.5(1)

(1) Includes unorganized townships' roads - 4,749.7 miles.

Motor Vehicle Registrations,
Counties, Niagara Region, 1955, 1964 And 1965.

		Passenger	Truck(1)	Dual Purpose(2)	Total	% change 1965/1955	% change 1965/1964
A - Burlington							
Brant	1955	20,188	3,875		24,063		
	1964	24,471	4,469	1,830	30,770		
	1965	27,059	4,602	2,229	33,890	40.8	10.1
Wentworth	1955	81,170	13,388		94,558		
	1964	100,333	14,284	7,769	122,386		
	1965	110,703	14,628	9,131	134,462	42.2	9.9
Sub-total	1955	101,358	17,263		118,621		
	1964	124,804	18,753	9,599	153,156		
	1965	137,762	19,230	11,360	168,352	41.9	9.9
B - Niagara							
Haldimand	1955	7,883	2,624		10,507		
	1964	9,795	2,833	612	13,240		
	1965	9,909	3,031	815	13,755	30.9	3.9
Lincoln	1955	28,753	5,728		34,481		
	1964	40,191	7,250	3,333	50,774		
	1965	45,708	7,826	3,769	57,303	66.2	12.9
Welland	1955	37,958	7,897		45,855		
	1964	50,104	7,101	4,091	61,296		
	1965	53,945	7,966	4,449	66,360	44.7	8.3
Sub-total	1955	74,594	16,249		90,843		
	1964	100,090	17,184	8,036	125,310		
	1965	109,562	18,823	9,033	137,418	51.3	9.7
Total, Niagara Region	1955	175,952	33,512		209,464		
	1964	224,894	35,937	17,635	278,466		
	1965	247,324	38,053	20,393	305,770	46.0	9.8
Total, Ontario	1955	1,292,133	287,942	25,457	1,617,853(3)		
	1964	1,877,443	334,759	151,085	2,363,287		
	1965	1,976,625	344,519	163,071	2,484,215	53.6	5.1

(1) Estimated
(2) Not available on a county basis in 1955; included in figure for Trucks. Dual Purpose includes station wagons and similar vehicles.
(3) Total includes motorcycles.